



BADGER STATE Smoke Signals

For Radio Amateurs • By Radio Amateurs



RETURN ADDRESS:
Kenneth A. Ebner
822 Wauona Trail
Portage WI 53901

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All Aboard!



IT'S THUMBS UP ALL AROUND from some of the Radio Amateurs who rode the Great Circus Train on its annual railtrek with 75 glistening, old circus wagons from Baraboo's Circus World Museum to Milwaukee via Janesville and Chicago for the Great Circus Parade on July 17. Left to right are: Jim Romelfanger, K9ZZ (Editor, Badger State Smoke Signals); Phil Reb-

ensburg, KC9CI (with Milwaukee Co. ARES); Fred Wendt, W9ZAG (Wisconsin Section Emergency Coordinator); John Leekley, WB9SMM (Milwaukee Co. Emergency Coordinator); and Jack McLeland, W9ATK (Milwaukee Co. ARES). Not shown is Warren Schall, K9IZV, who was on the air when this photo was taken.

- Photo by Don Evenson, K9JYX

Congressional Resolution Supports Amateur Radio

Help Needed

Congress has become involved in the ARRL's (and Amateur Radio's - Ed.) fight to preserve amateur frequencies, especially the entire 220-MHz band presently threatened by FCC Docket 87-14. A resolution has been introduced in both houses of Congress which expresses the "Sense of Congress" that it supports Amateur Radio and its frequency allocations as vital for emergency communications and public safety purposes. These resolutions, Senate Concurrent Resolution 127 and House Concurrent Resolution 317, were introduced by California Senator Pete Wilson and Rep. Robert Dornan of California's 38th District respectively.

In his extension of remarks published in the Congressional Record dated June 23, Rep. Dornan states that "the Amateur Radio Service should be supported in its emergency communications efforts in every way possible," and criticizes FCC Docket 87-14, which proposes to reallocate the bottom 2 MHz of the amateur 220-MHz band. Rep. Dornan says "The use of the 220-225 MHz band during the numerous fire emergencies in the Western United States in 1987 is a good reason why the 220-222 MHz band should not be taken away from the amateur service" and he cites examples of amateur packet networks using the 220 MHz band in California.

Rep. Dornan has also sent a letter to each Congressman detailing the public service activities

(Please turn to page 13)

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END IN PLACE



THEN SOLDER...



ON THE INSIDE

Swapfests and Other Social Events	2
The Test Point	3
Wisconsin Nets Association Ltd.	4
The Budget Discone	5
Riverland Amateur Radio Club	6
Happily, Everyone Has One	7
John's Junk Box	10
New Products	11
Silent Keys	13
Eau Claire Amateur Radio Club	14
The Wisconsin Packeteer	16
Yellow Thunder Amateur Radio Club	19
Field Day Photos	7, 9

BADGER STATE Smoke Signals

For Radio Amateurs • By Radio Amateurs

Officers and Staff:

CHAIRMAN
Kenneth A. Ebner, K9EN
822 Wauona Trail
Portage, Wisconsin 53901
(608) 742-3560

EDITOR
Jim Romelfanger, K9ZZ
412 1/2 Ash Street
Baraboo, Wisconsin 53913
(608) 356-4249

TREASURER
Jim Decker, WB9UQT
P.O. Box 337
Baraboo, Wisconsin 53913

ADVERTISING MANAGER
Harry Westlund, K9EHJ
720 Jefferson Street
Baraboo, Wisconsin 53913
(608) 356-6836

SUBSCRIPTIONS

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ADDRESS CHANGES AND CORRECTIONS should be sent to Kenneth A. Ebner, address above.

EDITORIAL MATERIAL, PHOTOGRAPHS, FEATURE ARTICLES, AND EXCHANGE PAPERS should be sent to Jim Romelfanger, address above.

DISPLAY ADS OR INQUIRIES REGARDING DISPLAY ADS should be directed to Harry Westlund, address above.

SUBSCRIPTIONS should be sent, with check or money order (do not send cash), to Jim Decker, address above.

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EDITORIAL DISCLAIMER

The opinions expressed in editorials, guest editorials, columns, articles, and letters are the opinions of the authors only, and do not, unless otherwise stated, express or imply agreement or endorsement by Badger State Smoke Signals, or any other organization.

Swapfests and other Social Events

EAA SHOW JULY 29 THRU AUGUST 5. Oshkosh, WI. Be sure to visit the Ham Shack.

SATURDAY, AUGUST 13, 1988. The 9th Annual Rhinelander Swapfest will be held at the Gigantic Rhinelander Ice Arena, in Rhinelander, WI. Set up begins at 8 a.m. with sales starting at 9 a.m. Free Parking. Food and beverages will be available. License exams given in the morning only. An auction will be held at 1 p.m. Reserve tables (\$5.00) available until July 30, or bring your own tables. Dealer Welcome. Contact: Leonard Bauman, K9RMN, 1312 Dorothy St., Rhinelander WI 54501. Telephone (608) 369-3296. See their ad in the July issue BSSS.

SATURDAY, AUGUST 13, 1988. The Green Bay Mike and Key Club's Summer Swapfest, will be held at the Community Service Center, 1673 Dousman St., Green Bay, WI. Doors open at 7 a.m. with sellers allowed in at 6 a.m. Free parking, Amateur Radio Exams (see Testpoint). Admission \$1.00. 8 ft. tables \$5.00, by reservation only. Send SASE with payment to Green Bay Mike and Key Club, Inc., c/o Cathy Strommen, KD9WD, Rte., Box 316A, Greenleaf, WI 54126.

SUNDAY, SEPTEMBER 11, 1988. The second annual FALL FEST sponsored by the Tri-County ARC, will be held in the parking lot of the Blackhawk Technical Institute, between Beloit and Janesville, on highway 51. Buy, Sell, Swap, \$2.00 per person. Bring your own table, this is an outdoor event. See ad this issue of BSSS.

SATURDAY & SUNDAY, SEPTEMBER 24th & 25th. RADIO EXPO, sponsored by the Chicago FM Club, will be held at the Lake County IL, Fairgrounds, Rts. 45 & 120, Grayslake, IL. Flea market 6am to 6pm, exhibits 9am to 4pm. Advance tickets: \$4.00, at the gate: \$5.00. Table reservations: \$7.50 per day. Contact CFMC, P.O. Box 1532, Evanston, IL 60204.

SUNDAY, OCTOBER 30, 1988. LATE FALL HAMFEST. At the Lake County IL, Fairgrounds, Rts. 45 & 120, Grayslake, IL. Admission \$3.00, tables \$5.00. First come first served. Contact CAP, 637 Emerald St., Mundelein, IL 60060.

SATURDAY, NOVEMBER 12, 1988. 6.91 FRIENDLY FEST, sponsored by the Milwaukee Repeater Club. Held at Serb Hall, 51st and Oklahoma, Milwaukee, WI. Amateur radio exams given. (see Testpoint) Tables: \$3.00 advanced, \$4.00 at the door. Admission: \$2.00 advanced. \$3.00 at the door, contact The Milwaukee Repeater Club, P.O. Box 2123, Milwaukee, WI 53201.

Club Meetings

BADGER AMATEUR RADIO SOCIETY
(W9YT - UNIVERSITY OF WISCONSIN - MADISON)
Monthly while school in session - 2nd Wednesday - 7:30 p.m. - B-314, Electrical Engineering Building.

CENTRAL WISCONSIN RADIO AMATEURS, LTD.
(STEVENS POINT)
Second Wednesday.

EAU CLAIRE AMATEUR RADIO CLUB
2nd Tuesday - 7:30 p.m. - Parks and Recreation Bldg., Oxford and 1st Streets, Eau Claire. Hams, guests welcome. Travelers welcome on wide area club repeater K9UXP, 146.31/91.

FOUR LAKES AMATEUR RADIO CLUB (MADISON WI)
First and third Tuesdays - 7:30 p.m. - Red Cross Bldg., 4860 Sheboygan Ave.

FOX CITIES AMATEUR RADIO CLUB
Third Monday - 7:00 p.m. - Roosevelt Jr. High School, 318 E. Brewster St., Appleton. Info: (414) 735-6294. Winter Banquet, January 23, 1988. Contact KA9MPP.

GREEN BAY MIKE AND KEY CLUB
Second Thursday - Red Cross Bldg., corner Danz and Deckner, Green Bay.

GREEN FOX AMATEUR RADIO CLUB
Third Monday - 7:30 p.m. - Green Lake Town Hall, int. of county hwy. K and N.

KETTLE MORaine RADIO AMATEURS
Second Friday.

LAKESHORE RPTR. ASSN.
4th Tuesday, Jan., Apr., Jul., & Oct., 7:30 p.m. Red Cross Bldg., 4521 Taylor Ave., Racine, WI.

MANITOWOC COUNTY RADIO AMATEURS
First Wednesday - 7:00 p.m. - City Hall, 817 Franklin St., Manitowoc.
Second Wednesday - Red Cross Building, 1816 Washington St., Manitowoc.

MENOMONEE FALLS AMATEUR RADIO CLUB
Last Tuesday - Doors open 7:30 p.m., meeting begins 8:00 p.m. - Security Savings and Loan, Menomonee Falls. Amateurs and guests welcome.

MILWAUKEE RADIO AMATEURS CLUB
Fourth Thursday - Wauwatosa Savings and Loan, 7500 W. State St. (November on the third Thursday. No meetings in July, August and December.) Meetings begin at 7:00 pm.

OZAUKEE RADIO CLUB
Second Wednesday - 7:30 p.m. - Saukville Community Center.

QCWA - SOUTHEAST WISCONSIN CHAPTER #162
Meets third Monday monthly, 7:30 p.m., Around the Clock Restaurant, 3012 Rapids, Drive, Racine.

RACINE MEGACYCLE CLUB
Second Tuesday, 7:30 p.m., Red Cross Bldg., 4521 Taylor Ave., Racine, WI

RIVERLAND AMATEUR RADIO CLUB
First Tuesday - 7:30 p.m. - Onalaska Community Center, Onalaska WI.

ROCK RIVER RADIO CLUB
First Tuesday - 8:00 p.m. - Dodge County Sheriff's Dep't, 141 N. Main, Juneau WI.

SHEBOYGAN COUNTY AMATEUR RADIO CLUB
Second Tuesday - 7:00 p.m. - Sheboygan Red Cross/Boy Scout Bldg., 2032 Erie Ave.

SOUTH MILWAUKEE AMATEUR RADIO CLUB
First Wednesday - Legion Post 434, Shepard Ave., Oak Creek WI. Auctions in March and October.

TRI-COUNTY AMATEUR RADIO CLUB
Meetings are held at 7:00 p.m., the second Sunday of each month at the Trinity Lutheran Church, 314 Barrie, Fort Atkinson, WI.

WEST ALLIS RADIO AMATEURS CLUB
Second Tuesday - 8:00 p.m. - St. Francis Savings, 9330 W. Greenfield Ave.

WISCONSIN VALLEY RADIO ASSOCIATION (WAUSAU)
First Tuesday - 7:30 p.m. - Location varies; info on 146.04/64, Wausau.

YELLOW THUNDER AMATEUR RADIO CLUB (BARABOO)
Days rotate: 1988 meeting dates: Thu., Aug 11, Mon., Sep. 19, Tue., Oct. 11, Wed., Nov. 16, Thu., Dec. 15. Monday meetings in room 28D of the Baraboo Civic Center; all others in room 25. Meetings start 7:30 p.m.

The TEST POINT



The following are known locations where Amateur Radio license examinations are scheduled in the Badger State area.

August 11, 1988	Milwaukee, WI (MRAC)
August 13, 1988	Green Bay, WI
August 13, 1988	Rhineland, WI
August 14, 1988	St. Cloud, MN
September 10, 1988	Appleton, WI
September 10, 1988	Bloomington, MN
September 17, 1988	Milwaukee, WI (BE)
September 17, 1988	St. Paul, MN
September 24, 1988	Wisconsin Rapids, WI
October 9, 1988	Bloomington, MN
October 15, 1988	Milwaukee, WI (BE)
October 15, 1988	Eau Claire, WI
October 15, 1988	Minneapolis, MN
November 12, 1988	Menomonie, WI
November 12, 1988	Rhineland, WI
November 12, 1988	Bloomington, MN
November 19, 1988	Milwaukee, WI (BE)
December 3, 1988	Stevens Point, WI
December 10, 1988	Appleton, WI
December 10, 1988	Bloomington, MN
December 17, 1988	Milwaukee, WI (BE)
December 17, 1988	St. Paul, MN
March 18, 1989	Menomonie, WI
June 17, 1989	Menomonie, WI
November 11, 1989	Menomonie, WI
Monthly, First Sat.	Racine, WI
Monthly, Third Sat.	Loves Park, IL

GENERAL RULES FOR MOST EXAMINATIONS:

Be sure to check with sponsors in the event there are changes and/or errors in the dates or information given.

Most examinations require filing an FCC Form 610 and advance registration at least 30 days before the exam date. (Some VECs permit walk-ins. Check with sponsor.)

To register, you must first secure a copy of the current FCC Form 610 and fill it out completely (AND CORRECTLY). Get your form from an FCC Field Office, the ARRL or Badger State Smoke Signals. Send a 25¢ SASE if you request one from the ARRL or BSSS. In most cases, forms can also be obtained from the sponsoring group.

ARRL/VEC examinations require a check for \$4.55 payable to "ARRL/VEC".

The FCC now requires applicants to show their original Amateur license to the VEC. A copy of your license must be attached to your FCC form 610. You will also be required to have a photo ID, or other acceptable identification.

Technician class licensees must show proof of testing before March 21, 1987, in order to upgrade to General with a code test only.

Additional information is given below.

MILWAUKEE METRO AREA TEST TEAM - MRAC/VEC (MRAC)

Next tests are Thursday evening, August 11, 1988, at 7:00 p.m. at Wauwatosa Savings and Loan, 7500 West State St., lower level. Please arrive promptly so test can be completed by 10:00 p.m. Bring your original license and three good photocopies, a pen, and \$4.55 for the exam fee. Walk-ins accommodated if time permits. Register in advance on a Postal Service 15 cent post card; print the grade of license you are applying for, and your name, address, and telephone number. Send the card to The Milwaukee Radio Amateurs' Club, Inc., N50 W16328 Pin Oak Ct., Menomonee Falls, WI 53051.

Club, Inc., N50 W16328 Pin Oak Ct., Menomonee Falls, WI 53051.

BADGER EXAMINERS (BE) - MILWAUKEE

September 17, October 15, November 19, & December 17

Unless otherwise noted, examinations are administered beginning at 1:00 p.m. at St. Nicholas Parish, 5353 N. Green Bay Ave. (2 1/2 blocks south of Silver Spring), Milwaukee. Number for coin telephone at exam location is 228-9994. Walk-ins are welcome. Bring your original license, a good photocopy of it, and a second form of identification. Technician license holders must bring proof of having been tested prior to March 21, 1987 to upgrade to General with code test only. To register in advance, send a post card with your name, test or tests you wish to take, date you wish to be tested, your call sign, address and telephone number to Badger Examiners, Mickey Dolgin, KB9G, 507 E. Spooner Rd., Fox Point, WI 53217. (414) 351-5311.

FOX CITIES AMATEUR RADIO CLUB VOLUNTEER EXAMINERS

Examinations will be given in several locations, as follows:

August 13, 1988 - Community Service Center, Green Bay Swapfest, Green Bay, Wis., 8:00 a.m. until noon.

September 10 and December 10, 1988 - Roosevelt Junior High School, Appleton, Wis., 9:00 a.m. until noon. Walk-ins are always welcome. For more information, contact Larry Siebers, KD9IA, 7077 Weyers Rd., Freedom, Wis. 54131, or call (414) 788-3823.

STEVENS POINT, Wisconsin

December 3, 1988

By Central Wisconsin Radio Amateurs, Ltd. Contact Joseph W. Larson, N9JW, 644 Portage St., Stevens Point, WI 54481. (715) 344-1182.

WISCONSIN RAPIDS, WI - ARRL/VEC

September 24, 1988

Contact Eugene R. Santoski, K9UTQ, 1220 18th Street South, Wisconsin Rapids, WI 54494. (715) 423-6368.

EAU CLAIRE, WI - W5YI/VEC

9:00 A.M. to Noon. Exams are given at the University of Wisconsin Facilities Management Building in Eau Claire, except that the July exams are given in conjunction with the Eau Claire Amateur Radio Hamfest. There is no pre-registration requirement. Contact: Carl Searing, W9NW, 1129 McKinley Road, Eau Claire, WI 54703. (715) 834-1303.

MENOMONIE, WI

Credit Union Office Building, Conference Room, lower level, 444 S. Broadway, Menomonie, WI. Contact: Dr. Thomas W. King, KD9TT, c/o office, 444 S. Broadway, Suite 1, Menomonie, WI 54751. (715) 235-4747 (D), 235-5757 (H).

RHINELANDER, WISCONSIN

August 13, 1988 (Rhineland Swapfest)
November 12, 1988.

All except August will be held at Nicolet College Science Center in the Fireside Room starting at 9:00 a.m. All sessions held at Nicolet College will be by appointment only. Registration required thirty days in advance of testing session, with check payable to "DeVry VEC" for \$4.55. Only Technician class and above

will be given at the testing sessions.

August 13th testing session will be conducted at the Rhineland Swapfest, corner of Chippewa Dr. and Co. Hwy. CC in the Rhineland Ice Association Ice Arena. Walk-ins will be accepted at the swapfest. Registration on the hour from 9:00 a.m. till 12:00 noon.

Novice tests will be given by appointment at any time except at regular scheduled testing sessions.

Contact: Leonard Bauman St., K9RMN, 1312 Dorothy St., Rhineland, WI 54501. (715) 369-3296.

RACINE, WISCONSIN - ARRL/VEC

First Saturday of each month except during summer and the Christmas holidays.

Exams are given at the Red Cross Building, 4521 Taylor Ave., Racine, WI. Walk-ins are permitted.

Send pre-registration to: William R. Firchol, Jr., N9DMP, 1912 27th Street, Kenosha WI 53140.

Third Saturday of every month.

Northern Illinois Volunteer Examiners (DeVry VEC). Held at North Suburban Library on North Second Street in Loves(Park, IL. Contact: Gene Melton, AK9N, 2901 Billie Rd., Rockford, IL 61109, (815) 874-6867

MINNESOTA TESTS

August 14 - St. Cloud
September 10 - Bloomington
September 17 - St. Paul
October 9 - Bloomington
October 15 - Minneapolis
November 12 - Bloomington
December 10 - Bloomington
December 17 - St. Paul

To register for these tests, or for more information, contact as follows:

St. Cloud Amateur Radio Club

Len Carlson at (612) 252-0783

Amateur Radio Association of Bloomington

Art Putt at (612) 881-7181

St. Paul Radio Club, Inc.

Mary Ketzler at (612) 426-4438

Minneapolis Amateur Radio Club

Jeff Kolb at (612) 699-6961.

Minnesota test information courtesy of Marv Mahre, WOMGI.

This section of Badger State Smoke Signals is available to publicize your Volunteer Examiner Amateur Radio license examination schedules.

Please send us your schedules of dates, times, and locations that you will be conducting examinations and we will include the information here. Be sure to include contact address and any other necessary requirements. Information should be sent to K9EN or K9ZZ at the address shown on page 2.

SSB

SELL SWAP BUY

OUR WANT ADS GET RESULTS

FOR SALE: Older test equipment. Distortion analyzer, test oscillator, electronic counter, receiver power unit, panadaptor, oscilloscope, "diddle box". Sean Kilgorn, 314 E. edgewater, Portage, WI 53901. telephone (608) 742-4163.

Wisconsin Nets Association Ltd.

WISCONSIN NETS

Net	WNA	Freq	UTC	CDT	Manager
BWN	Yes	3984	1100	0600	WD9HD
BEN	Yes	3985	1700	1200	KA9RII
WSBN	Yes	3985	2230	1730	K9EP
WNN	Yes	3723	2300	1800	KA9TTM
WSSN	Yes	3645	2330	1830	N9BDL
WIN/E	Yes	3662	0000	1900	WB9ICH
WIN/L	Yes	3662	0300	2200	W9NGP
NWTN	Yes	34/94	2330	1830	NS9Q
Gr. Bay	No	72/12	0145	2045	WB9NRK
			Thurs	Wed.	
RACES	No	3993.5	1715	1215	WC9AAG
		USB Tues and Thurs			
RACES	No	3993.5	1300	0800	WA9OAY
		LSB Sunday			

Section Manager's notes

Richard R. Regent, K9GDF
5003 South 26th Street
Milwaukee, WI 53221

The Wisconsin Nets Association will hold its Annual Picnic on September 10th at North Wood County Park. The picnic festivities are at noon and meeting at 1:00 p.m., with door prizes, refreshments, and awards later. Bring a friend or your entire family. You don't have to be a traffic handler or WNA member, everyone is welcome at the WNA Picnic.

September 10th at 9:00 a.m., Fox Cities ARC exams at Roosevelt Junior High School, Appleton, more information from KD9IA.

September 11th, Tri-County ARC Fall Fest at Blackhawk Technical Institute between Beloit and Janesville on Highway 51.

September 17th at 1:00 p.m., Milwaukee area exams by Badger Examiners, 5353 North Green Bay Avenue, registration with KB9G.

September 24th exams at Wisconsin Rapids, contact K9UTQ.

Get a copy of the new ARRL "Technical Coordinator Manual", a nine chapter book written and illustrated by yours truly, includes an index of QST technical articles, available from ARRL (225 Main St., Newington, CT 06111) for only five dollars. You can get it free by volunteering as an Assistant Technical Coordinator or if you now are an ATC.

New Assistant Technical Coordinators are WB9ULA, AD9W, and WB9RUK.

Let me know if you wish to volunteer for the ARRL State Government Liaison appointment for Wisconsin.

Sorry to report Silent Keys: traffic handler KD9XE (ex-N9DHT), and EAA Fly-In Ham W9KKK.

Thanks to K9ZZ our Public Information Officer for his excellent volunteer work writing and editing the Badger State Smoke Signals. If you would like a copy of BSSS, write to K9ZZ, 412 1/2 Ash Street,

Baraboo, WI 53913.

WB9WKO assigns his science class students to prepare radiogram messages for send to learn about Amateur Radio, with 115 sent this year. Everyone in the class gets ARRL's "Archie's Ham Radio Adventure" comic books to study as homework.

WISCONSIN SLOW SPEED NET

(Glass Arm Report)

Lee G. Andreas, N9BDL, Net Manager
Route 1, 7600 Highway D East
Lake Tomahawk, WI 54539-9500

The summer QRN season has arrived and very little static has been observed on 80 meters. Perhaps there is a correlation with the drought conditions. I say there is a 100% correlation.

The second quarter of 1988 showed 362 checkins with 118 pieces of traffic being cleared. The time it took to run the 92 nets was 1299 minutes or 21 hours and 39 minutes. All categories were down when compared to the first quarter of the year. This, I believe, is normal, so I won't get too excited about it.

The top five stations to check in during the quarter were: Ed, W9NGP, with 67 checkins; Adrian, KA9FVX, with 38 checkins; Jim, W9CXY, with 32 checkins; Dwight, AG9G, with 31 checkins, and Paul, N9FVN, with 19 checkins. If the heat doesn't subside soon, there will be even fewer checkins. Slim Rice, W9NGP, gets the award for checking in under fire (or heat). He reported 90° in the shack one evening as he was sending his message. That is DEVOTION.

The summer eyeball meeting of the WNA was held in pleasant weather this past June. There was a shakeup in the leadership, and Les, W9YCV, stepped forward to act as chairman for the meeting. His Honor, the Mayor of New Holstein, K9LGU, served as acting secretary.

It was great to see many of the active net participants and have some time to chat with them. I had the pleasure of meeting Sherm, W9NGT, for the first time. It also was pleasant visiting with K9ANV, WB9ICH, and W9NGP for almost an hour. Too bad these meetings must be interrupted by a formal business meeting.

I'm looking forward to seeing many of the same people at the fall WNA Picnic at North Wood County Park in September. Perhaps you will be one of those in attendance. If you can't be there, try checking into one of the eight WNA affiliated nets. None of the net managers bite. They all bark on occasion.

73, Lee, N9BDL

Attend the
1988 WISCONSIN NETS ASSOCIATION PICNIC
September 10, 1988
North Wood County Park

WISCONSIN INTRASTATE NET/EARLY

Larry Guthu, WB9ICH, Net Manager
706 West Jennings
New London, WI 54961

Hi ya gang!

Boy, where has the time gone? It seems like just last month I was writing for the BSSS.

To begin, I have been somewhat absent from the net during the week because of job related long hours. By the time I get home, the net is usually over with or just about done, but I can see by the net reports that we are still hanging in there, despite the heat and band conditions at times.

I am thankful that I have such a devoted group, and know that the net will run so well without me; that makes being net manager a much easier job. I am also deeply indebted to N9BDL for taking so many net controls and for picking up the net reports for me.

As for any net biz, there is really not much to write about. Everything seems to be running smoothly, and no one has made any complaints.

I am still looking for people to fill a couple of NCS spots on Friday and Saturday nights. If you are interested, please let me know. I also have a couple of 9RN spots open yet; if you would like to give it a go, let me know.

We have a new 9RN rep for Saturday night; he is Bob, W9KLN. Please give him all your support and encouragement.

That is about it for this time around. Have a safe and happy summer, and remember to keep the WINning spirit flying high.

Top ten for the second quarter (out of a possible 91 days):

1.	N9BDL	84
2.	W9KLN	79
3.	W9NGP	77
4.	W9YCV	73
5.	W9CBE	69
6.	WB9ICH	37
7.	W9CXY	33
8.	AG9G	25
9.	K9GDF	21
10.	W9OT	19

73, Larry, WB9ICH

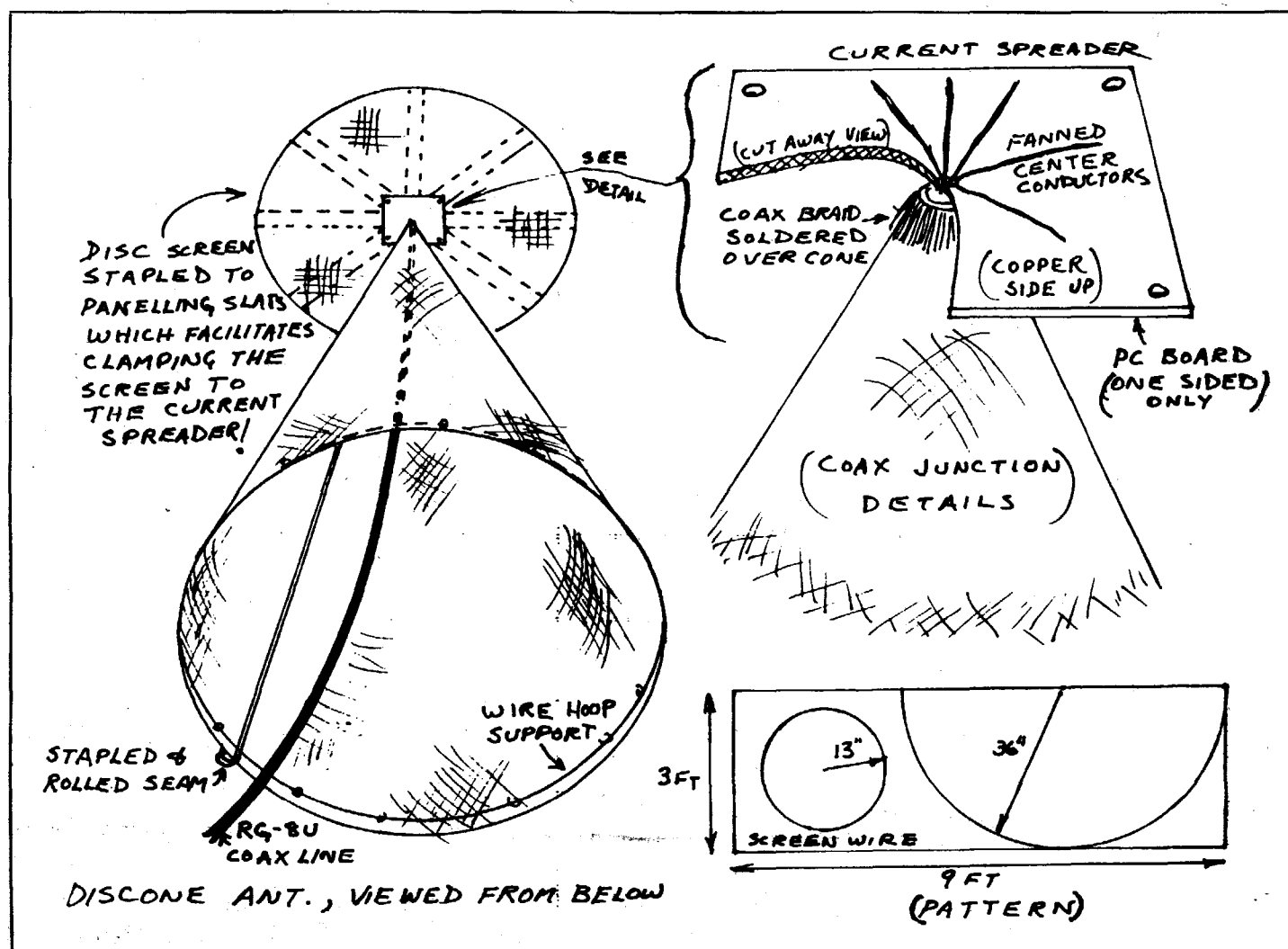
WISCONSIN INTRASTATE NET/LATE

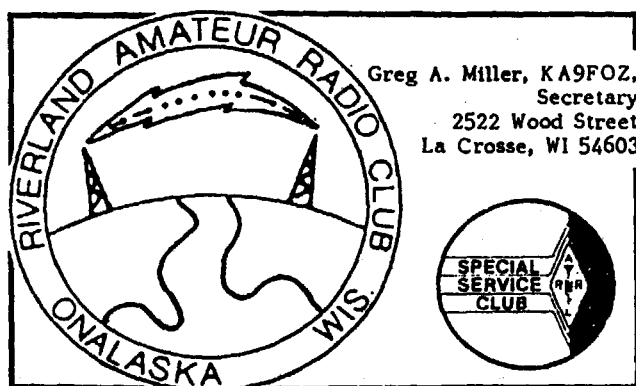
Ed Rice, W9NGP, Net Manager
W126 Lang Road
Oconomowoc, WI 53066

Business is picking up on WIN/L. Our QTC and QSP has increased for each month of the quarter. We have a small group of participants, and we would like to

(Please turn to page 15)

popularity of the 220 MHz band after Noise Enhancement; this antenna covers 2 meters, 1 1/4 meters, and 70 cm. This antenna would also serve well as an indoor antenna for scanning receivers ("scanners"). Have fun building and using your discone; its appearance is perhaps a little odd, but its performance just might surprise you!

☐ 1 year ☐ 2 years ☐ 3 years ☐ new ☐ renewal



Greg A. Miller, KA9FOZ,
Secretary
2522 Wood Street
La Crosse, WI 54603

On July 5th, 1988, at 7:40 p.m., the regular monthly meeting of the Riverland Amateur Radio Club was called to order by President Craig Goldbeck. Minutes of the June meeting were approved as read from the Badger State Smoke Signals. The Treasurer's report was approved.

37/97 REPORT

There was nothing to report as to the present repeater. It was reported that an individual has committed to the Club that he will match any offer that is put towards the repeater of \$50 or more to the maximum amount of \$2000.00. This person has asked to remain anonymous.

MALL DISPLAY

The display at the mall which was held on Field Day weekend was very successful as far as Saturday; Sunday was not as good. We had many curious people Saturday who had many questions. Thanks to Kent, W9LZQ, for helping out with the Packet Radio. Due to the amount of interference from the fluorescent lights, the HF rig would not receive and the Packet Radio would not work; Kent rigged up a digipeater in my van outside of the mall so that we could connect thru it. The Packet Radio, as well as the showing of the Amateur Radio video, were the most viewed displays.

FIELD DAY REPORT

Totals have not been tabulated as of yet, but a rough estimate shows around 2000 contacts made between all rigs. Craig read off a list of people who he wanted to thank for all of their help in set-up, manning the radios, and tear-down. He mentioned that the local news media was at the site with extensive coverage. Watch for the final results in the November issue of QST.

EXAM REPORT

The pass/fail rate for the June exams ran about the same as past exams. The next exam session will be about December, exact times and dates will be established at a later time.

SWAPFEST REPORT

At the June meeting, it was decided to pursue the use of the Logan High School gym for a larger Swapfest and Electronics Fair. After finalizing some of the paper

work required by the school, the costs that were estimated earlier were low as compared to the final amount. Because of this, it was decided to not rent the gym. This started the discussion on what we should do for the Swapfest this year. A motion was made that we try to secure the Community Center for the 20th of September for the Swapfest. This would be on a smaller scale than planned.

OLD BUSINESS

It was announced that our Club has been renewed as a Special Service Club. There were two areas that our club was lacking in, but a plan was worked out with the ACC that would qualify us.

The liability insurance issue was addressed again because of information that was obtained thru the Klein Insurance Company. It was noted that the price of this type of insurance obtained locally was overwhelming to the point that we do not get it. The insurance thru the League was discussed again, and is still tabled to another meeting.

Jackets are still available at \$32.50, as well as T-shirts at \$4.00; for those interested in ordering, see Craig.

NEW BUSINESS

There was a discussion as to whether we should transfer some money from the General Fund to the Repeater Fund. There was a show of hands to determine the amount of interest in doing this. It was decided that we would determine the amount at the time of purchase and donate then.

The monthly drawing was won by Gary Countryman; he will also run the August drawing.

Total members present was 24.

Meeting was adjourned at 8:13 p.m.

Respectfully submitted:

Greg A. Miller, Sec./Treas. RARC

PRESIDENT'S GAVEL — JULY 1988

WOW, what a Field Day weekend!!!! First of all, I'd like to thank a few people, hopefully without missing anyone: Bill Wood, Gary Countryman, Mike Tessmer, Steve Pavela, Jim Burcum, Scott Neader, Dick Low, and Bill Kleinschmidt. These people, in one way or another, really put forth extra effort to make our participation a success again. Also, thanks to John Kass and Dick Low for putting together a video record of our weekend, and all the other people who showed up or donated equipment and helped with extra points. Thanks a bunch, guys....

Let's not forget Greg Miller and his crew, consisting of Rick Williams and Glen Whitlock, at the Valley View Mall show. Thanks again....

Update on our hamfest: Sorry to say that Logan High is not going to be possible this year due to their raise in price and

other requirements; that leaves us at the Community Center for another year. We (the club) have decided that the hamfest should grow, but now is the time to start planning for next year. Like all club activities, this will not be a success with 3 people doing all the work. It will take more people to organize and run a fest. Let's put on an event people will want to go to and see and come back for; remember, it's for your benefit.

Our Explorer Post is organizing and should be underway within the next month or so. We're hoping to drum up some new Hams from the 25 people that show interest.

We had about 5 or so people who attended the last meeting from the Winona club; thanks, guys, it was fun having you down.

Remember, the next meeting will be held at the La Crosse County Courthouse, basement room B02, with a tour of the EOC to follow. The date is August 2nd at 7:30 p.m.

73 until next month,

Craig

MEMBERS PRESENT

Greg A. Miller
Duane Fruechte
Karl L. Olberg
George Koner
Mike Tessmer
Andy Boomer
Phil Uehling
Charlie Burch
Bill Winder
Walter Altus
Herman Ludvik
Dallas Miller
Craig Goldbeck
Laurence Knutson
Gary Countryman
Dick Low
John Kass
Art Osborn
Gary Webb
Wid Johnson
Bill Wood
Rick Williams
Glenn Whitlock

KA9FOZ
W9HWQ
W4ST
KA9HOP
NØBSH
N9HBQ
W9UP
KA9UUK
K9EGQ
WD9GCR
W9HJV
K9LEC
N9ETD
W9SFL
KD9RL
KØJYB
WA9IZY
WØJDC
NI9V
W9DM
WBØVYI
KV9U
NØBBW

GUESTS

Maty Johnson
Steve Mracjeck
Jack Stansfield
Ken Spihler
Dan Goltz
Mike Mullen

XYL/W9DM
N9CEY
KAØZYV
NØJP
KAØCRW
NØBUI

ERROR IN CALLBOOK: The Radio Amateur Callbook, Inc. reports that because of a computer programming error in the 1988 Callbook supplement, all Novice licenses are incorrectly shown as Advanced. This means that the supplement (Vol. 66, No. 2) cannot be used to determine license class of these licensees. (The ARRL Letter)

Field Day 1988



These photos were taken at the Field Day site of the West Allis Radio Amateur Club. In the photo at left is Ron Hooker, K9WTF.



In the photo above is Ron Gorski, N9AU. This station operated 40 meters, all modes, and tallied 1,490 contacts. Nice effort, indeed!

Happily, Everyone has One

By Richard R. Regent, K9GDF
Section Manager, Wisconsin
5003 South 26th Street
Milwaukee, WI 53221

Nearly every active traffic handler has relayed a birthday message. But have you ever wondered about the benefits of sending birthday radiograms? Wonder no more, here are some reasons why such bundles of joy are being sent.

First, a few extra birthday messages put on the National Traffic System at a slack time gives traffic handlers some message-handling practice and adds a few extra points to their monthly traffic totals. Next, ARL FORTY SIX, which in plain text means: "GREETINGS ON YOUR BIRTHDAY AND BEST WISHES FOR MANY MORE TO COME," break up the endless routine of traffic and net report messages that may wear patience thin. Then too, activity attracts newcomers, keeps old-timers busy training the newcomers, and makes Net Managers proud of their thriving nets.

The annual birthday message, an infrequent but well-timed reminder of the traffic handling aspect of Amateur Radio, can motivate an inactive ham to get back on the air or even more. KR9F told me, "One year when I got a birthday message it must have come on a particularly unusual day. I became so enthused about becoming active in hamming again that within two months I upgraded to Extra, was on the air every day, and then started instructing Cub Scouts to learn about Ham Radio. The excitement of my renewed activity in turn encouraged many of the Scouts to get licenses. That little birthday message made a big difference in my life."

When a traffic handler warmly delivers a birthday message by telephone to another Ham, it provides a chance to exchange



news, answer questions, promote local upgrade license exams, and talk about club or League activities. On the other hand, if the message is delivered to a person who is not an amateur, it puts two people directly in touch, presenting an opportunity to describe the Amateur Radio traffic system and community public service activities.

How can you begin gathering birthdays? For 32 years, I have collected birthdays of many people I have met, especially those who live beyond the 50 mile local phone call range. Happily, everyone has one. It began by gathering relatives' birthdays and then included anniversaries. Also, the old version of the Sweepstakes contest exchange included the month and day of the operator's birth; such logs provided a major source of my current collection of 1,500 birthdays. On-the-air QSOs are great spots to collect birthdays, one at a time. Sometimes friends may tell you their birth date without realizing it: "I'm taking Monday off; it's my birthday." Then all you need to do is remember the person's call-sign and look up their address to complete another birthday record. Asking amateurs

at swapfests or out-of-town club meetings to sign into a log that has a column for birthdays can help gather a collection quickly.

One simple method to keep records of birthdays is to write each person's birthday on a separate piece of paper. Cut letter-sized scrap sheets of paper into four rectangular pieces. Next, write the birth date at the upper right; name, address and phone in the middle; and remarks at the bottom. Then sort the paper pieces by dates and store them in a small box. Look through this tickler file box once every week to see which messages should be sent. No computer is needed to keep these records, because the individual slips of paper allow easy organizing before sending, and changes can be made immediately with a pencil.

Responses can be rewarding or funny. When packet radio was getting started, K1ZZ quickly wrote back after getting a birthday message: "Thanks for remembering my birthday. You might be interested in how your NTS message made the last leg of its journey: by packet radio! KA1ECL left it on the W1AW-4 packet radio bulletin board." Others are pleased, too. K9-CLO says, "Nice gesture, very thoughtful." K3WT jests, "Thanks for the birthday message, where's my present?" W6XB reports, "Thank you for all the time you've been sending me messages for a Happy Birthday." Active trafficker Geri, N4GHI, phoned me long distance. She said, "Is this K9-GDF?" After I said "Yes," Geri surprised me by singing an entire verse of "Happy Birthday Richard" on my special day. The next year, she organized fifteen Virginia traffic handlers to each send birthday messages to me. Wonder what next year will bring?

After sending birthday messages for many years, you'll probably have to make a

(Please turn to page 11)



RANDOM SHOTS

IT WAS YEAR 2 for the TransAmerica Bicycle Trek, in which cyclists ride more than 3,300 miles from Washington State to New Jersey, raising pledge money for the American Lung Association. Radio Amateurs accompany the cyclists to keep them on the correct routes, and to keep them in touch with the outside world with the help of Base Support Operators. Shown in the photo at left are helping Hams Jere Felten, W7TVA; Gayle Delanty, N7IGU; Sharon Felten, WA7ZSQ; and Arlene Carter, KB7EQQ; and Rusty Burwell, N7LCC. (A total of 19 Amateurs in communications vans accompanied the trekkers at different times; some of the Amateurs covered the entire 3,300+ mile trek). Last year, 200 cyclists made the trek; this year, there were 307. During their stop in Baraboo, they were visited by Baraboo Amateurs Harv Hamer, K9YHO (Base Support Operator for this leg of the trek); Art Kleefisch, W9WSS; Phil Anderson, W9TP (who delivered a message to a cyclist); and Jim Romelfanger, K9ZZ. Another trekker checker photo is on page 12 of this issue.

Tri-County Amateur Radio Club Presents

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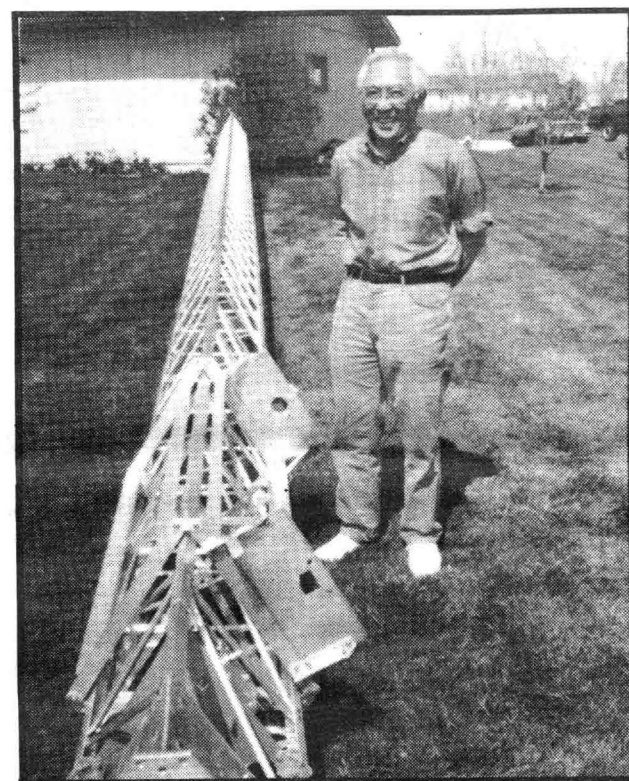
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MASAYUKI ("MAS") IYAMA, W8WYK, above, is shown with his new tower before it was erected; it's now up and sporting some nice antenna hardware at its top. Mas lives next door to John (WB9TQG) and LaVonne (AC9J) Frank in Madison. Another Amateur lives next door to the Franks on the other side!



SORRY MA'AM --- BUT THIS IS THE
ONLY GROUND I CAN FIND ON THE
PLACE

Field Day 1988

YELLOW THUNDER
AMATEUR RADIO CLUB

WB9FDZ/9

Owen Park - Columbia County, Wisconsin

TOP RIGHT: Brian Schell, KB9ANB, Baraboo, prepares to set up the Novice station.

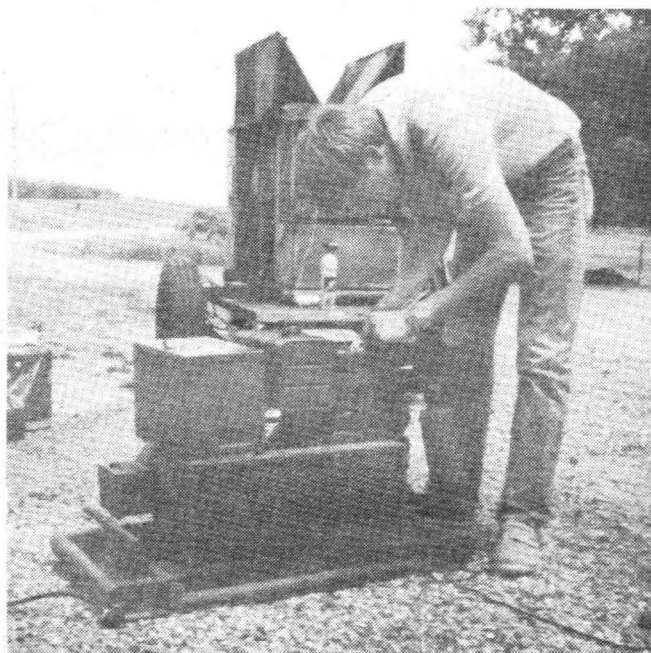
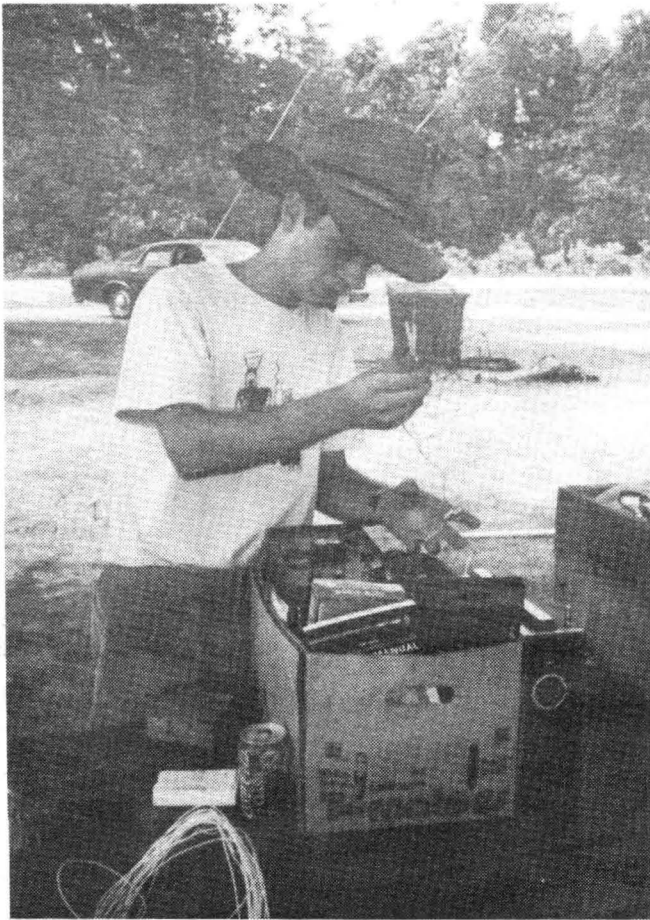
TOP RIGHT: Duane Grotophorst, KA9HKL, Loganville, operates 2-meter SSB; the Owen Park location is great for VHF operation.

LOWER LEFT: Harold Reif, KA9YQP, Harry Westlund, K9EHJ, and Art Kleefisch, W9WSS, all of Baraboo, untangle some rather unruly guy rope.

BOTTOM CENTER: Duane Grotophorst, KA9HKL, mutters various threats in a futile effort to convince the generator in the foreground to run. The generator proved to be equal to the dispute; it wouldn't run, even when told it was headed for that great scrap yard in the sky. Bill Klinkner saved the day when he arrived with a much newer and fully functional generator.

LOWER RIGHT: Bill Klinkner (left), Sauk City, and club president Steve Schwoegler, WB9RNL, Wisconsin Dells, ready the 15-meter wire two-element beam for erection.

- Photos by Jim Romelfanger, K9ZZ -



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John's Junk Box

By John W. Frank, WB9TQG
P. O. Box 5113
Madison, WI 53705

GD-1B DIP METER GOES SOLID STATE

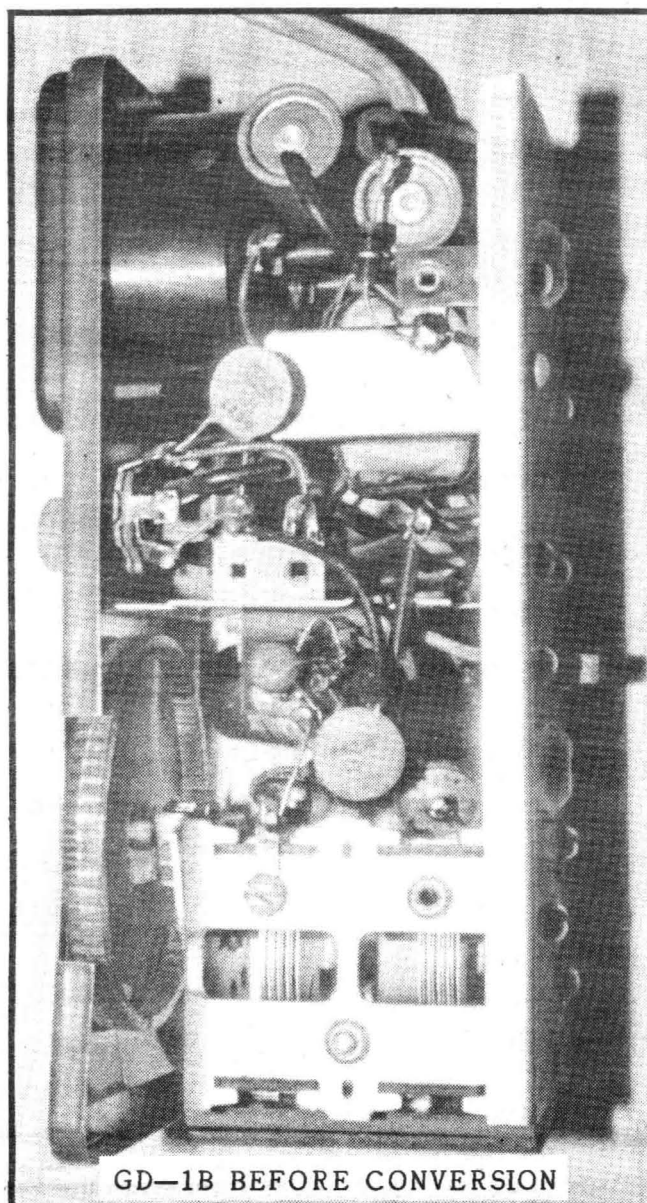
Several years ago, I bought a used dip meter at a swapfest. It worked just fine until not long ago, when the triode tube burned out. At first, I thought it would be a very simple matter of going down to the local electronic parts emporium and buying a new tube. Unfortunately, nothing is ever that simple. The local parts emporium didn't have the tube I needed. The tube was available from some distant warehouse at a price that was greater than what I paid for the dip meter. Buying a new solid state dip meter would have been even more expensive. What to do? I decided to convert my old Heathkit GD-1B dip meter to solid state.

At first, I wanted to convert the dip meter to use modern solid state components, while retaining all the original operating features and reusing as many of the original parts as possible. My first plan called for a bridge rectifier on the filament winding of the original power transformer as a source of DC to operate the circuit. Although this probably would have worked, I decided this was carrying the reuse of parts a bit too far. The use of a nine volt battery would add very little extra expense to the completion of this project, and would free the dip meter from its dependence on the AC power line.

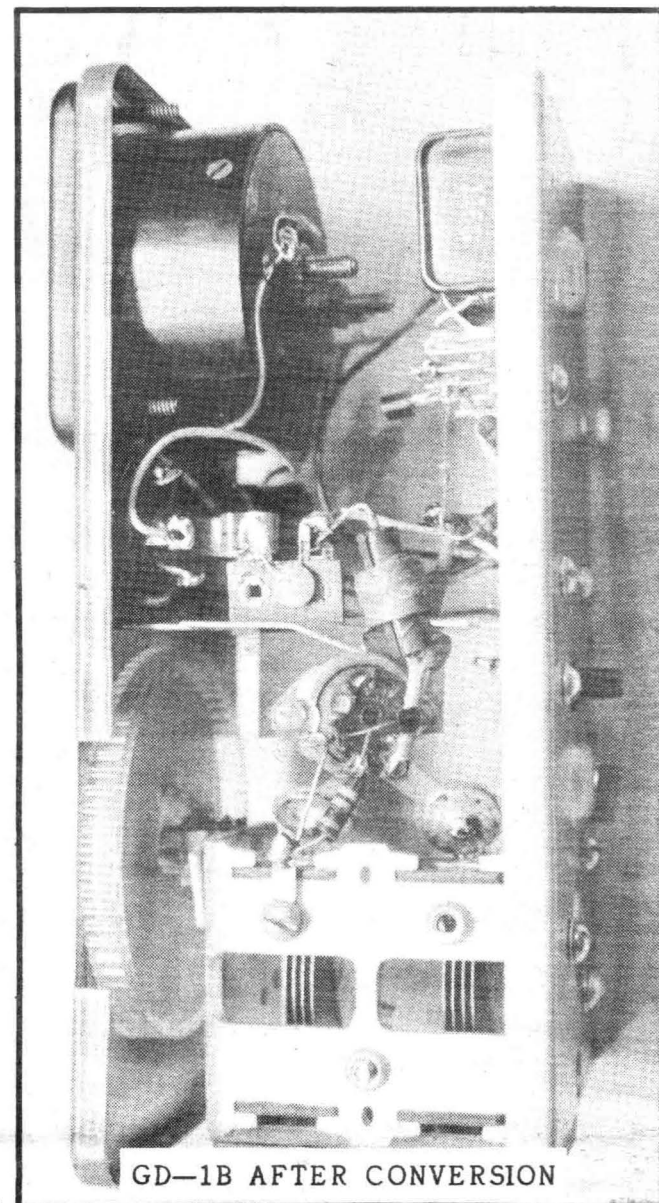
After removing the GD-1B from its case, I realized the conversion would be relatively easy. First, I removed the dead triode from the tube socket. Next, I removed the power transformer, rectifier, and electrolytic capacitors. Then I removed the resistors and disc ceramic capacitors, while leaving the tuned circuit components, the tube socket, the meter, the 10K pot, the slide switch on the bottom of the chassis, and the phone jack in place. Since one of my goals was to reuse as many of the original components as possible, I saved the resistors and capacitors.

The rest of the conversion was very straightforward. I used pins 1, 2, and 3 of the empty tube socket as terminals to connect the FET. Mounting the FET as close as possible to the tuned circuit components helps minimize stray capacitance, which could contribute to tuning dial inaccuracy. The space formerly occupied by the power transformer provides ample room for the nine volt battery and the components which comprise the meter driver. As the schematic shows, many of the original components were reused in the conversion to solid state. Switch S1 is on the back of

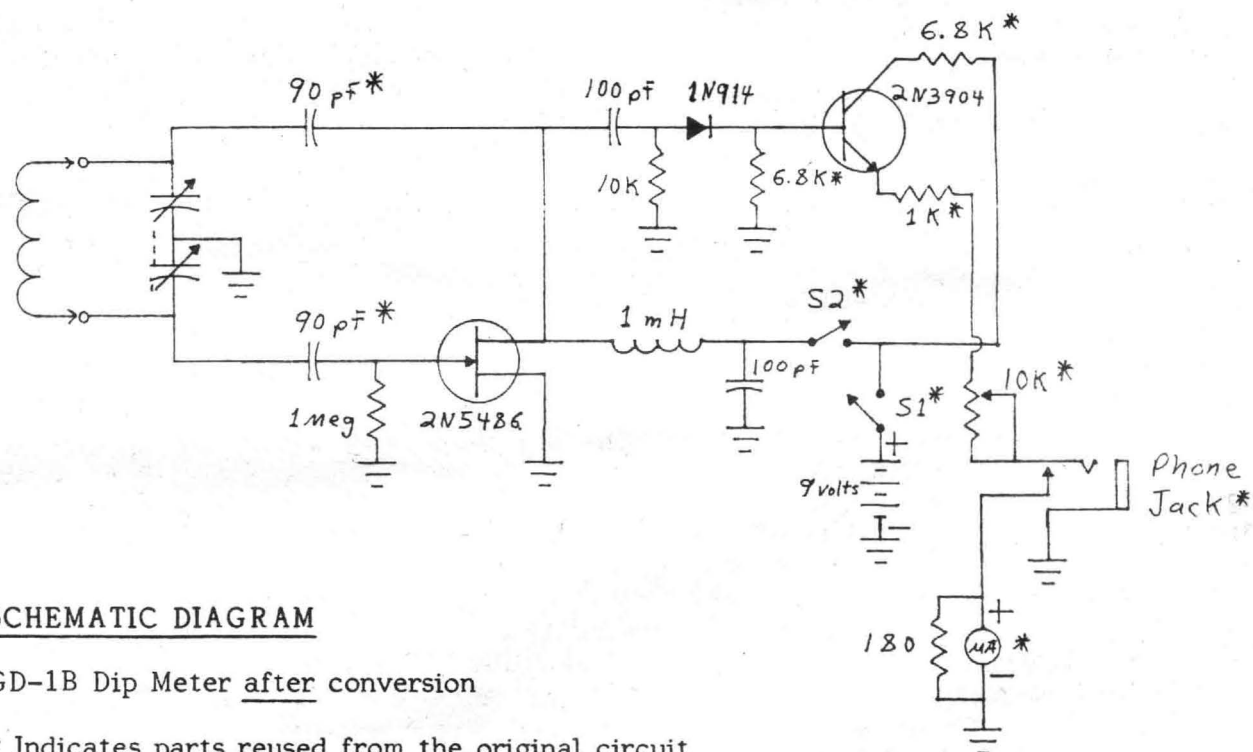
(Continued on page 11)



GD-1B BEFORE CONVERSION



GD-1B AFTER CONVERSION



SCHEMATIC DIAGRAM

GD-1B Dip Meter after conversion

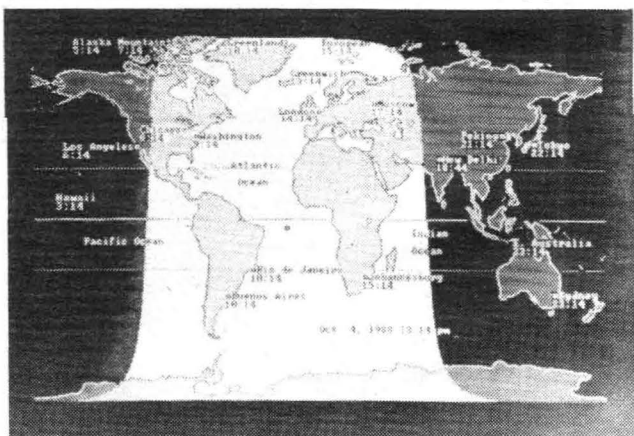
* Indicates parts reused from the original circuit

PARTS LIST

(These parts are required in addition to parts reused from the original, unmodified meter)

- | | |
|--|----------------------------------|
| 1 2N5486 field effect transistor (FET) | 2 100 pf disc ceramic capacitors |
| 1 2N3904 NPN transistor | 1 1 mH RF choke |
| 1 1N914 silicon diode | 1 9 volt battery |
| 1 1 megohm 1/4 watt resistor | 1 battery holder |
| 1 10K 1/4 watt resistor | miscellaneous hardware |
| 1 180 ohm 1/4 watt resistor | |

New Products



MFJ-1286 GRAY LINE DX ADVANTAGE FOR PERSONAL COMPUTERS

MFJ Enterprises, Inc. announces the release of new DX software for IBM PC/XT/AT and compatible computers.

The new MFJ-1286 Gray Line DX Advantage/Terminator is a computerized DX-ing tool. It predicts DX propagation by giving users instant access to Gray Line positions for any place in the world at any time and date from 1980 to 1999.

Even the casual DXer can work rare DX by knowing exactly when conditions are best for DX.

You get a high resolution world map that displays the Gray Line as a moving area of day and night that changes with time.

The Gray Line is the day/night divider line that indicates a path for DX propagation. With the MFJ-1286 Gray Line DX Advantage, you'll know exactly when to take advantage of the Gray Line.

It shows you the moving Gray Line, UTC times, time zones, sun position over the earth and latitude/longitude markers.

You can customize the MFJ-1286 Gray Line DX Advantage and display time and location for any QTH in the world -- it makes DXing and skeds precise and easy.

You can run it by itself or as a memory resident program in conjunction with your beam header or other software. It works with all graphics: Hercules, CGA, EGA and composite.

It comes with three maps: a default Land Mass Map, a map that shows the latitude/longitude markers and a third map that displays the division of time zones throughout the world. CGA works with the Landmass Map and lets you send the display to your printer.

You can enter any date after 1980 to set your skeds for any time in the future. Or, check solar/gray line positions from past QSOs to answer questions about particularly good or bad RST. Or, use it to sked your next DXpedition by previously determining the sunrise/sunset times at the QTHs you plan to work.

It also corrects for the north/south position of the sun and the curvature of the earth, making it perhaps the most accurate Gray Line predictor yet.

Pressing a function key switches the new MFJ-1286 Gray Line DX Advantage to a high speed display mode. This lets you watch solar and Gray Line positions change in increments of 2 minutes, 6 minutes, 1 hour, 1 day, or 1 week. Or, you can pause the high speed display to study a position.

It retails for \$29.95, and is available from any MFJ dealer or direct from MFJ Enterprises, Inc.

For more information, contact MFJ Enterprises, Inc., P.O. Box 494, Mississippi State, MS 39762, or call (601) 323-5869; orders may be called to (800) 647-1800.

(MFJ News Release)

JOHN'S JUNK BOX

(Continued from page 10)

the 10K sensitivity control; S2 is the slide switch on the bottom - it still selects the dip meter or wavemeter function. The phone jack still retains its original function. Since the tuning capacitor and plugin coils were unchanged, I found the dial calibration also unchanged. The 180 ohm meter shunt was needed as part of the dip meter conversion because some settings of the sensitivity control caused the meter needle to be pegged without it. A 180 ohm shunt provides a full scale meter reading of about one milliamper.

The conversion of the GD-1B dip meter from vacuum tube to solid state has been very rewarding for a number of reasons. The dip meter is easier to use outdoors because it is no longer tethered to the nearest AC outlet. The conversion was accomplished at a fraction of the cost of a new dip meter. By using readily available components and digging through

my junkbox, the cost of conversion was even less than the cost of a new tube. The dip meter and wavemeter functions work just like they did before.

Although the dip meter I converted to solid state was a GD-1B originally sold by Heath back in the 1950s, the principles of conversion to solid state could probably be applied to a variety of dip meters from that era.

Happy modifying!

John, WB9TQG

Editor's Note: We published a notice last month that John would no longer be writing "John's Junk Box" and "Repeater Profiles"; we are happy to report that we were incorrect! John DOES have a busy schedule; his articles may not appear EVERY month, but he will continue to submit articles, as time allows.

HAPPILY, EVERYONE HAS ONE

(Continued from page 7)

few updates to your records. Hams who deliver the messages might send you an ARL SIXTY SEVEN return message, "YOUR MESSAGE NUMBER UNDELIVERABLE BECAUSE OF PLEASE ADVISE," to alert you to those birthday recipients who move, change calls, become silent keys, and unlist or disconnect phones. Sometimes traffic handlers might need assistance if the message gets garbled during relay or when there is no ham in the area to deliver the message. You can track hams that change calls by finding their last names in a Last-Name Index Callbook which is probably available at your local library. Keeping accurate records requires revisions, updates, changes, and even deletes, but the research work ensures messages move swiftly to their destinations.

Thanks to all traffic handlers who relay and deliver birthday messages that make lots of folks happy and occasionally spark renewed ham radio interest by remembering a forgotten amateur with a kind thought.

BADGER STATE SMOKE SIGNALS CLUB DEAL

Badger State Smoke Signals can serve your club's members as your club's newspaper. The cost to your club is as low as \$4.80 per member per year - that's as low as 40 cents per member per month! Your club's minutes are published for you, as well as other items of interest and photos you submit. For full information about the Badger State Smoke Signals, please contact Ken Ebner, K9EN, 822 Wauona Trail, Portage, WI 53901, or call Ken at 608/742-3560.

Builders - See Us!

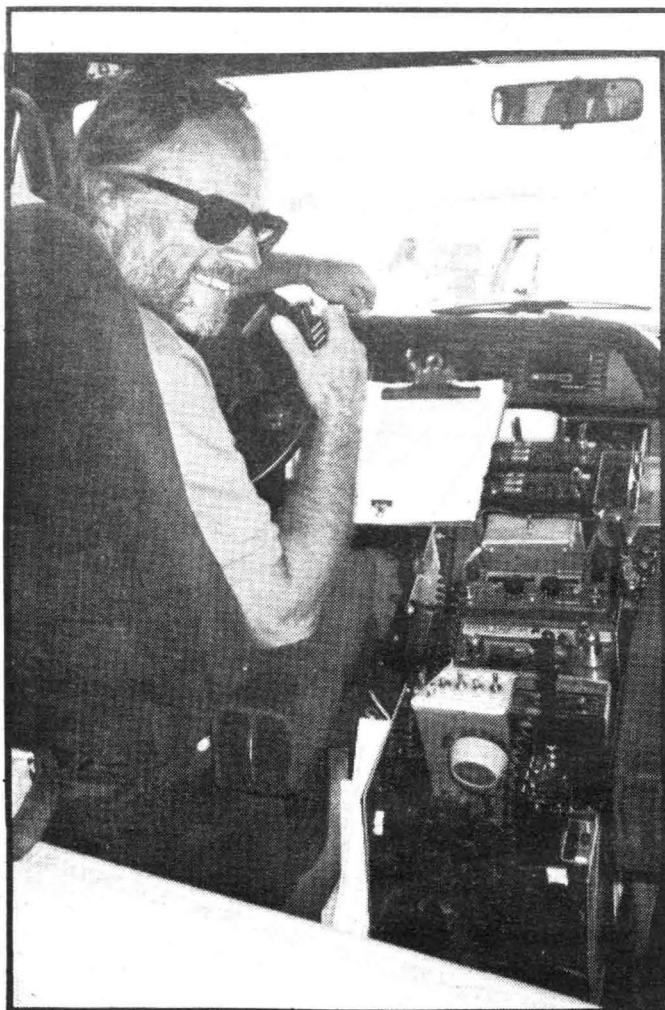
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TREKKER TRACKING

Jere Felten, W7TVA, is shown in his well equipped communications van, helping keep TransAmerica Bike Trek participants on the correct routes, and providing the trekkers with incoming and outgoing message service via Base Support Operators along the 3,300+ mile trek route. The equipment in the van includes Icom transceivers for 2 meters and 220 MHz, and a public address system and siren.

KA9DYS Gets QCWA Quotes from K9AA



Ero Erickson, KA9DYS (#776), on the left, past president of Quarter Century Wireless Association Chicago Area Chapter #2, met with Al Krones, K9AA, of Wisconsin Chapter #55 at the Schmidt Brothers Fish Shanty, Port Washington WI on May 23 to update old time notes.

Al, who was named after his father's two-masted lumber schooner "Alridge" which plied the lakes early in this century, retired as CW operator from WPDK of the Milwaukee Police Department years ago. Ero used to work him on police CW regularly for over 25 years via the Police Interzone radiotelegraph net.

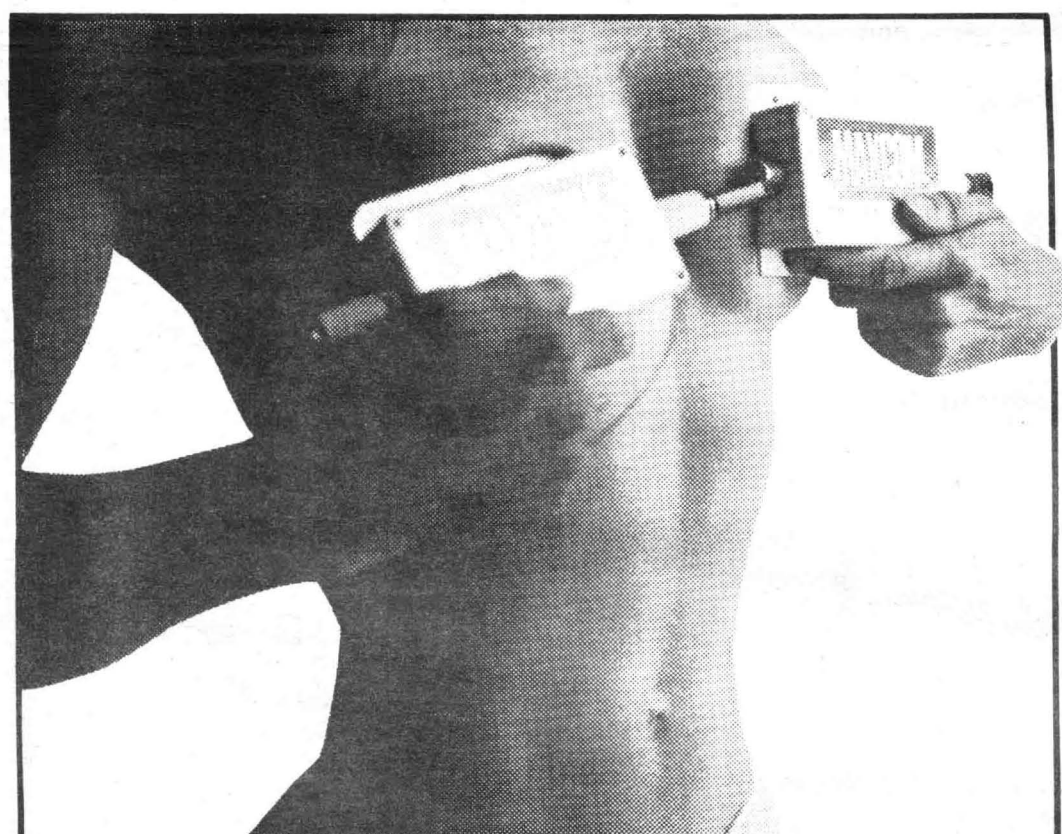
As years wore by, Al (then W9UIT) was asked, "AL WHEN U GG TO RETIRE?" The answer always was, "WEN I CROAK." Fortunately, it never happened that way, so when Krones considered that he'd get half pay if he stayed home and hammed, he resigned.

What really cinched it was the installation of an automatic garage door opener at Vliet Street where the station was located. It had one problem. When Krones keyed the Wilcox CW rig on 7480 Kc/s, the large door would fly open or come down. To solve the problem before squad cars would be damaged, the captain ordered the transmitter turned off.

Having stayed to the last dot, Al retired, and now, 25 years later, happily he is very much around. Congrats, OM.

- 73, Ero "Rain Static" Erickson
4024 North Pioneer Street, Chicago, IL 60634

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CONGRESSIONAL RESOLUTION SUPPORTS AMATEUR RADIO

(Continued from front page)

Senate Concurrent Resolution 127

CONCURRENT RESOLUTION

Whereas, more than 435,000 radio amateurs in the United States are licensed by the Federal Communications Commission upon examination in radio regulations, technical principles and the International Morse Code, and

Whereas, by international treaty and the FCC regulation, the amateur is authorized to operate his or her station in a radio service of intercommunications and technical investigations solely with a personal aim and without pecuniary interest, and

Whereas, among the basic purpose for the Amateur Radio Service is the provision of voluntary, non-commercial radio service, particularly emergency communications, and

Whereas, volunteer amateur radio emergency communications services have consistently and reliably been provided before, during, and after floods, tornados, forest fires, earthquakes, blizzards, train wrecks, chemical spills, and other disasters, Now therefore, be it

Resolved by the Senate (the House of Representatives concurring) That it is the sense of the Congress that --

1) It strongly encourages and supports the Amateur Radio Service and its emergency communications efforts, and

2) Government agencies shall avoid actions which would reduce amateur radio frequency allocations used for these purposes.

(From The ARRL Letter, published by the American Radio Relay League)

the La Crosse WI 16/76 repeater as written by Bruce Bjerstedt, K9CUT.. and much, much more.. all coming in the September 1988 issue of Badger State Smoke Signals!

Silent Keys

Elmer Erickson, W9KKK, of Omro, Wisconsin, passed away on June 24, 1988 at the age of 78. Elmer was an early member of the Experimental Aircraft Association (EAA) Chapter 325, and was the prime mover of the famed EAA Convention Ham Shack, which operated with several calls over the years, among them KS9EAA. He had served as Emergency Coordinator for Winnebago County and was a past president and a charter member of the Oshkosh Amateur Radio Club. He held a private pilot's license, had owned a Waco 10 aircraft, and had helped in the rebuilding of many modern airplanes since his retirement. As a Radio Amateur, Elmer was active on nearly all bands and modes. His enthusiasm for Amateur Radio continues with his grandson, Dave Ewald, WB9ZHN, Oshkosh.

- George Loudon, N9CCI

Jim Thomson, KD9XE (ex-N9DHT), became a Silent Key on Friday, June 10. He was 65. He was a charter member of the Eau Claire Amateur Radio Club, and was very active on the amateur traffic nets and participated fully in Army MARS.

- Lisa Houck, KA9RII



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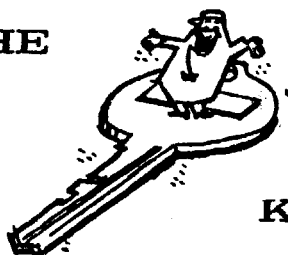
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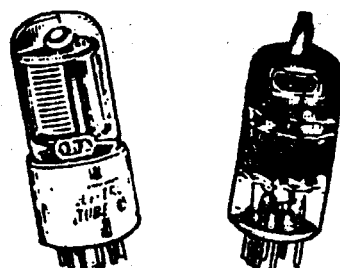
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Eau Claire Amateur Radio Club

Bob Fallis, W9BAR,
Secretary
1851 McKinley Road
Eau Claire, WI 54703

The next meeting of the Eau Claire Amateur Radio Club will be held August 9th at 7:30 in the evening in the Parks and Recreation Building at 1300 First Avenue. Our meetings are open to everyone.

MINUTES OF THE JULY 14TH MEETING

The meeting was called to order at 7:35 p.m. by President Jerry Marx, NG9A. Twenty two members and one visitor were present. The financial report was read and approved. The minutes of the June meeting, as published in BSSS, were read and approved.

OLD BUSINESS

A report on the July 11th Hamfest was given by Steve Harr, KD9YO. He reported that attendance was down slightly, but in general things went well. It was too early to have a financial report.

Jerry, NG9A, reported that exams were given to 26 persons. Our next tests here in Eau Claire will be given in October.

W9BAR reported on the 31/91 repeater. A new transmission line has been installed since the last meeting, and the machine is back in good working order. We are grateful to the local cable company, Wisconsin CATV, for their contribution.

The fellows are still meeting on Tuesday nights at the trailer. The hot weather has slowed things down a bit, but it should be operational soon. Lots of help is needed, so if you can be of help, call Carl, Andy or Layne. The trailer is now at the home of Darrold Patrow, N9FLK. Work time on it is not limited to Tuesday nights.

NEW BUSINESS

We have been asked to help during the American Legion Parade. The State Convention is being held in Eau Claire this year, and over 55 units are already signed

up for the July 16th parade. Harry Jensen, W9FYI, is our representative for this event, so if you can help, call Harry.

The JAYCEES are sponsoring an Air Show on July 23 and 24th. We have been asked to assist with this event also. John Case, KE9KH, is the man to call if you can help with this one.

We have been trying to locate the vests the club purchased some years ago. If they were worn during these events, it would give our people some identification.

ANNOUNCEMENTS

Roy Bushland, W9GIT, has been in the hospital.

The combined Eau Claire Amateur Radio Club and the Northern Wisconsin Amateur Radio Club picnic will be held August 21st. We have reserved Pine Pavilion, in Carson Park, for the event. Call John Case, KE9KW, for details.

LUNCH COMMITTEE: K9GXX and WB9-ULD.

The meeting was adjourned at 8:20 p.m.

Respectfully submitted:

Robert Fallis, Secretary

QCWA Invites New Members

The Quarter Century Wireless Association consists of 161 chapters throughout the world. The QCWA publishes a newsletter mailed four times a year.

The main purpose of the QCWA and its local chapters is to create a close bond of friendship and cooperation among its members. To become a member, you have to have been first licensed as an amateur 25 or more years ago. The nice fact about this organization is that Hams with individual interests from CW to computers are actively involved. The main purpose is to keep up the fraternity of Hams.

There are a number of local on the air nets which are operated by the different QCWA chapters. The frequencies are listed in each issue of QCWA news.

There is a QCWA memorial scholarship fund. Your help in building the fund is needed, as well as ideas which you might contribute which would make the fund more appealing to QCWA members.

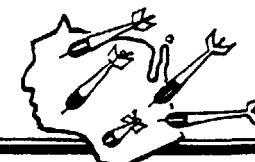
For more information about the QCWA, contact:

Richard Regent, K9GDF
5003 South 26th Street
Milwaukee, WI 53221
(414) 282-0312, or

Mickey Dolgin, KB9G
507 East Spooner Road
Fox Point, WI 53217
(414) 351-5311

You are welcome to check into the QCWA Net on Sundays on 3.985 MHz at 0830 Central Time.

Mickey Dolgin, KB9G



HERE and THERE

We are sorry to report that Scot Herrick, NB9C, president of the Four Lakes ARC, Madison, was seriously injured when he fell during tear-down at the club's Field Day site. The injuries required much surgery; he will be hospitalized for some time yet. Get-well cards may be addressed to him at Room 387N, Bed 1, Madison General Hospital, 202 S. Park St., Madison WI 53715.

:-----:

Gary (WB9ECO) and Vicki Pratt, of Duncanville, TX, sent a pink card in a pink envelope; it announced their first-born, a daughter, Amanda Lyn, born June 14. Amanda Lyn weighed in at 7 lbs, 5 ounces. Congrats!

:-----:

The caption for last month's cover photo of the Wisconsin Association of Repeaters Board of Directors was incorrect: reverse the two at left - N9AOZ at left; next is WB9MHS. Thanks WA9POV.

:-----:

Does anyone have any neat ideas how BSSS might acquire a laser printer? Having one would save us an immense amount of time, and would provide us with capabilities which we sorely need; although BSSS is produced with fairly modern equipment, we're nonetheless working under some severe handicaps which a laser system would remedy. Any ideas how this might be accomplished should be directed to K9ZZ.

:-----:

We understand that the 146.085 repeater of the Badger Amateur Radio Society (BARS) on the University of Wisconsin campus in Madison has "uninverted" (or "inverted", whichever way one wants to look at it); input is now 146.085, output 146.685. Other systems in the state on these "inverted split" channels are doing likewise. Also, look for greatly increased coverage on the Madison Area Repeater Association's 147.15 machine soon.

:-----:

Plan now to attend the 1988 Wisconsin Nets Association Picnic September 10 at North Wood County Park. More details in K9GDF's column in the WNA pages.

:-----:

DXers: A news release just received states: "A group of contest veterans led by AI6V will attempt to break the world record this year in the CQ Worldwide DX Contest. They will be on expedition to Aruba (a new separate country), formerly part of the Netherlands Antilles, and will use the call P4ØV for the Oct. 29-30, 48-hour event. As incentive for Amateurs to find them, P4ØV is offering a handsome certificate to those who work them on at least 4 bands. They will be active all bands 160 thru 10 simultaneously, listening especially for those trying for the certificate. The group has also promised to QSL every contact immediately after the event. To break the current 42 million point record, the P4ØV team must work at least 18,000 QSOs."

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WISCONSIN NETS ASSOCIATION

(Continued from page 4)

see more cities represented. Why not check in at 10:00 p.m. a couple of nights each week?

W9CXY has the most times as 9RN representative with a total of 33. W9YCV has the most QNI with 68 for the quarter. Traffic totals for April, May and June: QTC=173; QSP=139 for 80%.

73, Ed, W9NGP

WISCONSIN NETS ASSOCIATION, LTD.

MINUTES — MEETING OF JUNE 19, 1988

Stevens Point, Wisconsin

The quarterly meeting of the Wisconsin Nets Association, Ltd. was called to order by acting chairman W9YCV at 1 p.m. local time.

Members present: WB9JSW, N9BDL, WB9ICH, W9NGT, W9ZAG, K9ANV, W9YCV, K9GDF, W9NGP, K9EP, WB9YPY, NC9G, KE9FV, NS9Q, KC9CJ, K9LGU. Visitors' calls not recorded.

Motion (W9NGT/K9ANV) to name W9YCV as temporary chairman in the absence of N9GJL, who had resigned. Carried. K9LGU was appointed temporary secretary. Delegates and visitors identified themselves. Minutes of the 3/19/88 meeting were read and approved.

Treasurer's report was given by NC9G. He reported a previous balance of \$227.01 and, after receipts and expenditures, a present balance of \$232.95. The treasurer's report was approved.

REPORTS OF DELEGATES

WB9ICH (WIN/E) no report. W9NGP (WIN/L) mentioned a need for more QNI and QTC. KC9CJ (BWN) reported he had assumed the duties of NM at the request of WD9IID, who left the state in an employment change. He introduced K9EP as one of the BWN delegates. Dick requested participation in the weather net by stations in locations such as Madison, La Crosse, Green Bay, Marquette, Appleton, Eau Claire, and Waupaca. W9ZAG (SEC) was introduced by W9NGT. KA9VII (BEN) expressed concern about a marked decline in check-ins and the percentage of traffic cleared due to listing of non-forwardable traffic. It was suggested that perhaps stations not list such traffic or statistics not reflect the percent of traffic passed.

Some concerns of KA9VII about the test of 40 meters and other net problems were brought to the delegates' attention. Motion (KA9VII/N9BDL) to express a vote of confidence in support of Lisa's actions and to extend the appreciation of the WNA for her work. Carried.

K9ANV (WSBN) noted severe problems and requested that net control stations be reminded they must find substitutes if they are unable to meet their scheduled net.

Other stations monitoring the net frequency are encouraged to assume the NCS duties, if the regularly scheduled NCS does not begin shortly after net time. NS9Q (NWTN) reported good progress. N9BDL commented on the good participation on the WNN and the need for check-ins and traffic on the WSSN.

OLD BUSINESS

KA9VII and K9ANV presented a report on packet traffic handling. Their report and supporting correspondence is a part of these minutes (they are not published here, due to space limitations - Ed.) Motion (KA9VII/K9GDF) to forward the report to K9UTQ (STM and Training Officer of the WNA) with the charge to establish formal lines of communication between the Wisconsin Packet Radio Association and NTS traffic handlers and, with them, form a joint committee to develop a workable plan for handling NTS messages on packet. Carried.

The consensus of the delegates was that the WNA did not want to force or demand any specific method for packet traffic handling, but rather work with those stations who understand the mode well to build an efficient system for all. The need for training was described. It was specifically pointed out that there are problems of messages being brought on a BBS not in a form whereby the station who accepts and delivers the message can cancel it. The written report documents additional problems. It was also suggested that the system to be developed recognize when emergency conditions exist in a state or area.

K9LGU submitted notes on training as charged at the March meeting. Those notes are a part of these minutes (the notes are not published here, due to space limitations - Ed.)

KC9CJ, K9UTQ, and K9FHI will procure the proper refreshments for the annual picnic, September 10.

NEW BUSINESS

Discussion of the BSSS rate increase resulted in a motion (NC9G/N9BDL) that the initial dues of a WNA Booster will be \$11.00, regular dues \$9.00, and membership be available at \$3.50 for those who receive BSSS through some other membership. This policy will take effect July 1, 1988. Carried.

W9YCV agreed to serve as temporary chairman until the annual meeting in September. He indicated he would not be available for election to serve the full term.

A letter of encouragement from K9FHI was read to the delegates by K9GDF.

K9EP reported on a data base he has developed listing packet stations, operators, the communities they can serve by telephone, and phone prefixes. He requested more input from packet operators.

All delegates were reminded to encourage attendance at the Picnic and Annual Meeting on September 10.

Motion (N9BDL/WB9ICH) to adjourn.

Carried at 1:59 p.m. local time.

PROPOSED AMENDMENT TO W.N.A. CONSTITUTION — BY LAWS

(To be considered at the Annual Meeting)

Amend Constitution ARTICLE FOUR by adding a Section 5 to read as follows:

"The Board of Directors of the W.N.A. shall be the WNA Chairman, WNA Secretary, WNA Treasurer, Section Manager, and three members to be elected at large."

Amend By-Laws ARTICLE FIVE Section 3 to read: "...then Treasurer, then three at-large members to serve on the Board of Directors. A majority of the total votes...."

UNIVERSAL TRAFFIC QUERIES

Gene Santoski, K9UTQ
1220 18th Street South
Wisconsin Rapids, WI 54494

If you have been reading every article in this series, you should have a solid grasp on message structure. You have learned how to participate in traffic nets and how to draft a message.

Now you will learn how to "handle" messages.

WHAT DO YOU MEAN — "HANDLE" A MESSAGE?

The handling of message traffic includes receiving, relaying and delivery of a message and will be dealt with in that order.

First of all, if someone sends a message to you, you have RECEIVED that message. You must be sure to copy down the message EXACTLY as it is sent to you. It is preferable to copy a message on standard ARRL message blanks because all entries are in the order that they will be sent to you. However, a similar facsimile of that form can be used if you so desire. Whichever form you choose, it is a good idea to copy the PREAMBLE of the message on one line. When receiving the AD-

(Continued on page 19)

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THE WISCONSIN PACKETEER

Wisconsin Amateur Packet Radio Association (WAPR)

c/o CARL SCHUMACHER, N9BYS
7740 EVERGREEN TERRACE
BURLINGTON, WI 53106

Steve Loeffler, WB9ZRE, Editor, 123 W. Oshkosh St., Ripon, WI 54971

WAPR ANNUAL MEETING

WAPR returned to its birthplace, the South Milwaukee ARC Swapfest, on July 9th for its annual meeting. After hours out in the 99 degree heat among the goodies, a few remaining WAPR members and others sat in the air conditioned building to hold a brief meeting.

After receiving the treasurer's report, it was moved that membership dues for the 1988-89 year be set at \$5.50, which covers the cost of the Smoke Signals subscription for WAPR members. That motion was seconded and approved.

The annual election was held with the following being elected:

Chairman	Dan Bolander, WB9TYT
Vice Chairman	Roy Hawkins, WA9KEC
Treasurer	Carl Schumacher, N9BYS
Secretary	Dave Knaus, WA9POV
Director	Rudy Hilsman, KB9OK
Director	Ray Wolfe, WB9LST
Director	Pat Davis, KD9UU

The status of networking in the State was discussed with WB9TYT, WA9KEC, and WD9DHI describing current backbone and network node operations and near term plans for a LAN/backbone node site at New Berlin which, it is hoped, will tie several other nodes together and provide a

possible path to Northern Illinois. It was emphasized that the backbone network is primarily for mail forwarding by PBBS's and that individuals should not deliberately attempt to route through the backbone. Packets of individual stations may be automatically routed through the backbone if a particular network node determines it to be the best path.

Rudy, KB9OK, reported that PBBS's and network nodes are showing up on 145.03, the keyboard frequency, in Illinois and Indiana. This could render that frequency useless for its intended purpose, direct operator to operator communications without the clutter of automatic stations which exists on 145.01 and other channels. It was pointed out that the bandplan adopted by WAPR designates 145.03 for keyboard operation only and that there had been, at least, a gentlemen's agreement in Illinois to keep it so. Rudy distributed a message that he intends to send to stations in the affected area explaining the history of the 145.03 concept and reasons to maintain it.

Les Peterson, W9YCV, recommended that WAPR participate in Wisconsin Nets Association meetings which are held periodically both on the air and in person. Chairman-elect Dan Bolander, WB9TYT, said that he will contact K9UTQ to discuss establishing a liaison with WNA.

Amateur Packet Technology Dispute

A major controversy has ignited in packet radio circles over the emergence of a new digipeater switch firmware package known as TheNet from the well known German amateur organization NORD<>LINK. Before TheNet began to appear on packet switches around the country, the principle switching firmware was NET/ROM, a commercial product of a company called Software 2000. NET/ROM was written by its amateur radio operator owners, Mike Busch - W6IXU and Ron Raikes - W8BDED, as a commercial profit making venture.

Software 2000 earned much praise for its creation of NET/ROM, which plugs into the TAPR TNC-2 packet controller and compatible units. It enables digipeaters to network together for long distance packet routing. The company has, however, come under considerable criticism for its pricing and upgrade policies, but this has not prevented large numbers of digipeaters from purchasing and installing NET/ROM.

TheNet, a public domain package, was designed by German amateur radio programmers to be compatible with NET/ROM and to use a similar interface. NORD<>LINK has features not present in NET/ROM, and digipeaters are rapidly converting to TheNet which is available at no cost.

W6IXU and W8BDED allege that TheNet was essentially a reproduction of their own copyrighted NET/ROM program code. "From the preliminary information, we knew that NORD<>LINK had undertaken a major effort to completely disassemble NET/ROM, so we suspected that their offering would borrow heavily from our copyrighted code and algorithms," Mike Busch said. "When we finally got to look at TheNet, however, we were shocked to discover just how much of it was byte-for-byte identical to NET/ROM 1.3 ...with no effort made whatsoever even to disguise the plagiarism! [sic] That's when we went public with our statements about the theft of our

(continued on page 17)

WISCONSIN AMATEUR PACKET RADIO ASSOCIATION MEMBERSHIP APPLICATION

NAME _____ CALL _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

HOME PHONE _____

HOME PBBS _____ MONITOR FREQ _____

HOURS OF PACKET OPERATION: DAY _____ NITE _____ 24-HR _____

STATION: POWER _____ ANT GAIN _____ HEIGHT _____

TNC _____ COMPUTER _____

STATION CAPABILITIES: HF _____ 2M _____ 220 _____ 440 _____

I OPERATE A: DIGIPEATER _____ PACKET BBS _____

PRIMARY INTEREST IN PACKET _____

MEMBERSHIP TYPE:

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WAPR MEMBERSHIP - NEW OR RENEWAL

An application blank is included on this page for new or renewal memberships. Most WAPR memberships expired on July 1, 1988. If your membership has expired, please complete the form and send to WAPR along with your dues. If you have renewed your BSSS subscription, but not your WAPR membership, and would like to also renew your WAPR membership, just drop a note to WAPR or BSSS and it will be taken care of. The form can also be used for new memberships. In either case, be sure to send to WAPR at the address indicated. If you send it direct to BSSS it causes us delays and unnecessary additional expense.

WAPR - NET/ROM & NORD><LINK
(continued from page 16)

software." [That quote was from a message Busch posted on Compuserve - and also circulated on various packet nets.]

NORD><LINK programmers DF2AU and DC20C totally dispute Software 2000's claims. The German amateurs argue that they used different programming tools and created new code. It was obvious, however, that they were highly annoyed with amateurs precluding further amateur packet radio experimentation via the copyright route.

One Virginia ham examined the code in the two products and concluded that they were not as similar as Software 2000 believes. "I am now of the conclusion that Software 2000 is trying to lay down a smoke screen to stop the distribution of TheNet," Don Bennett - K4NGC, said in a packet message. "They are worried because a lot of NET/ROM digipeaters are converting to TheNet. All the bugs in NET/ROM are not in TheNet lookalike. In addition, you can now change the parameters, the callsign, the SSID, place an 80-character bulletin on it (in addition to it's own 80 character bulletin) and use it in duplex mode. Lastly, the source code will be available for others to add to it so that it can become a better product."

"Don't get me wrong," K4NGC said, "I am in no way connected with the people in Germany or NORD><LINK. I am just another ham who sees greedy people wanting to destroy someone before both sides are heard. I have been a ham since 1953 and it makes me sick to see what has been happening to the Amateur Radio community."

Mike Busch of Software 2000 noted, "One thing is certain ...Ron Raikes and I will never again undertake an unbundled amateur radio software project. Both of us feel that we have made a not-insignificant contribution to the technology of amateur radio, and we have been rewarded for our efforts by being kicked in the groin ...if the amateur radio community permits the likes of TheNet to flourish within it's ranks, it will slowly but surely lose the folks who are dedicated to pushing the technology forward. If this happens, Amateur Radio is dead ...long live CB!" Mike is asking that TheNet EPROM program not be further distributed or used by amateurs since, in his opinion, "...it is stolen property."

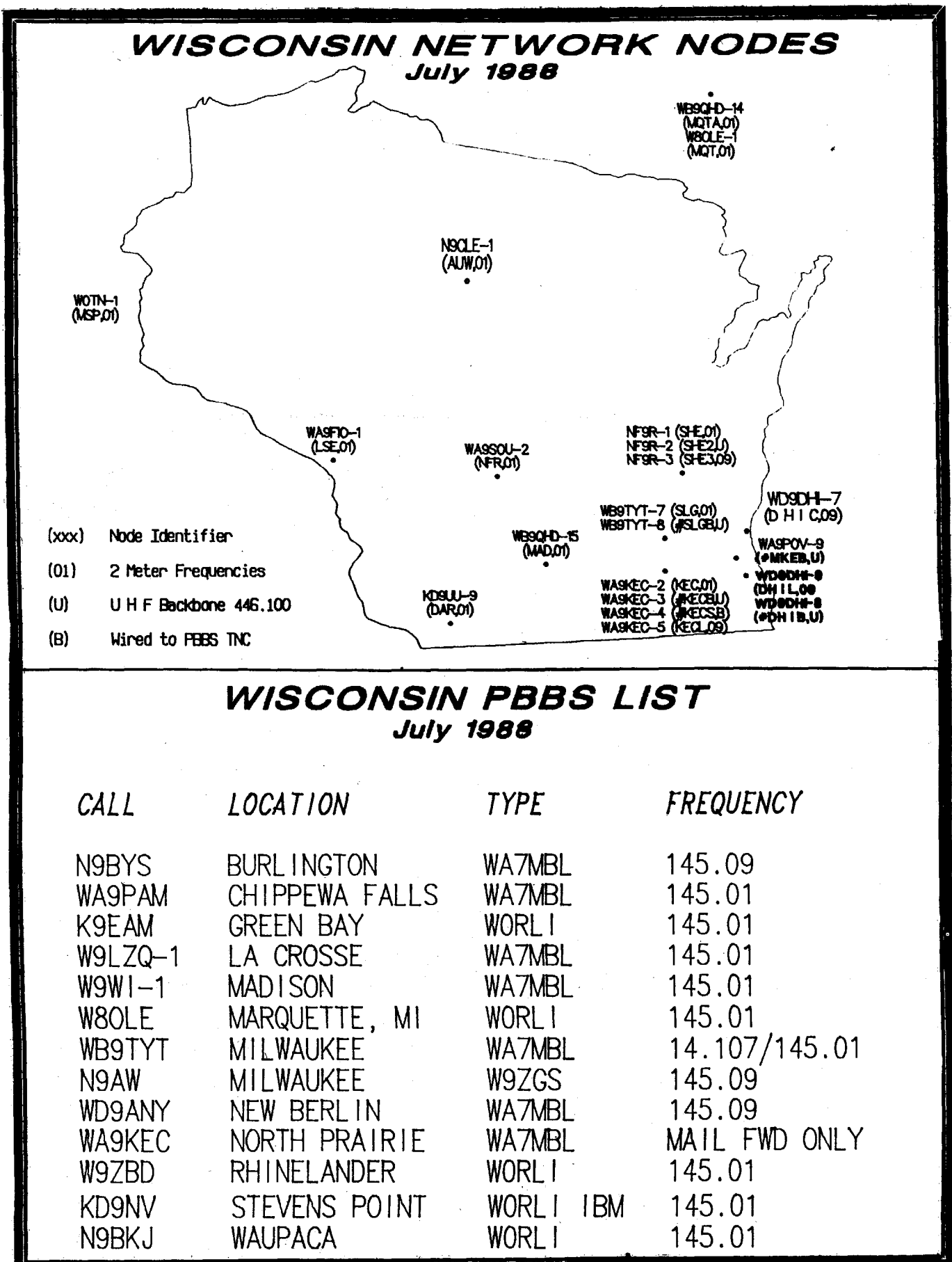
A message was sent to NORD><LINK asking for their rebuttal. An initial response was received from Heinz - DJ6AP in Cologne, Germany, who maintained he had no connection whatsoever with NORD><LINK or Software 2000. He said that NORD><LINK has made considerable contributions to the state of packet in Europe and that he had several pieces of their public domain software such as The/Box, a multi-connect mailbox program.

Heinz also contacted the German programmers involved and was assured that TheNet was not stolen from NET/ROM and that it was a total rewrite in C-code with enhancements. Heinz said the programmers acknowledged retaining the user command interface to keep it simple for the user. "They made so many functional changes in TheNet [so] that it would never be a code copied look-alike. The C-source [code] will be available for everybody soon and free of charge. Amateur Radio is a hobby and not [for] making money out of it!"

A later direct response from NORD><LINK indicated that they had purchased NET/ROM six times. They were disgusted to learn that there was no program to receive available updates and

the software had to be completely repurchased each time. NORD><LINK said that they had offered to work with Software 2000. They mentioned that it was NORD><LINK who first connected two TNC-1s together via RS-@@@ to form a genuine transparent crossband digipeater and establish automatic interlink routing using available hardware. NORD><LINK said they sent Software 2000 copies of that software source code at no cost. They also commented that they reported several internal errors in NET/ROM to Software 2000, corrections which later turned up in their code and sold in new versions.

NORD><LINK added that "...There would never have been TheNet if it weren't for this arrogance towards us [NORD><LINK] from Software 2000. ...for us, Amateur Radio does not mean to buy an EPROM from some company, stick it into a TNC and thats that. Nor is Amateur Radio for us a means to earn as much money as possible. ...we believe it to be much better if all creative amateurs continue to work on network software, not just those who take money for it. ...we know full well that TAPR (Tucson Amateur Packet Radio) has always called itself a non-profit amateur organization on one hand, but on the other hand...has immediately sent out warnings [against copying].



Is. TAPR possibly indeed concerned about it's profits?"

NORD<>LINK said that it had planned to release it's most recent source code for TheNet at the end of July, but in view of the conflict, was releasing it immediately free of charge. "He who wishes to experiment is warmly invited to do so. He who wishes for a company to get rich through the dependency of it's customers can just ignore TheNet."

The controversy roars on with amateurs lining up on both sides. Many, particularly those with business interests in the Amateur Radio industry - feel that without the advantages of commercial development, little would be developed or improved. There are just as many who staunchly maintain that the Amateur Radio Service exists 'to contribute to the advancement of the radio art' ... "with a personal aim and without business or pecuniary interest."

Whether or not the packet software was pirated has yet to be nailed down. The fact remains, however, that NET/ROM is a commercial copyrighted product and there are legal remedies available to Software 2000 to take care of the situation. The scene will probably shift to court.

W5YI Report Vol. 10 - #11 on Compuserve's HamNet

For those of you who may have been trying to figure out what the mode designator would be for packet:

VHF FM packet: F2D
HF FSK packet: F1D
HF SSB packet: J2D

73, Gary - N4HAP

AFTER ELECTION THOUGHTS

We now have a few new faces on the Board for WAPR & we are all looking fwd to implementing our many ideas & thoughts. I have scheduled a Board meeting for Saturday, August 13, 1988, at 10 AM at my house & all the board members have said they will attend. All Wapr members are also invited (please let me know if plan to attend, so I can be sure to have enough chairs).

As I look at the History of Wapr, I can only see many challenges that were faced & many challenges were met & conquered. I believe we also have many challenges facing us & hopefully with everybody's cooperation, we too may succeed in overcoming these challenges.

Here are a few of the areas that I feel need to be faced ASAP. Educational Programs & maybe

some Show & Tell Seminars. A better line of communication between our neighboring states & their Associations, Clubs, etc.

I also think we need a better look at NTS & WNA & hope to get a better explanation out to all on those subjects.

We are in dire need of some network planning for expansion of our present networks & also some high speed links to neighboring states, namely Illinois. We do have a lot of holes in the present network & hopefully we can help fill some of the gaps & also help to upgrade some of the older nodes. I have asked Roy, WA9KEC, to act as our Liaison person & he gladly accepted & we will be expanding on that front at the Board Meeting.

I hope to find some Volunteers from the General membership to help with the educational programs. That will be an experience in itself! I am open to any suggestions or thoughts you may have as to how we may better serve you.

We will have reports in every issue of Badger State Smoke Signals & will use that as our newsletter. Also, there will be an application for renewing your membership in WAPR which will automatically renew your subscription to BSSS. I am looking fwd to meeting every member & talking Packet sooner or later.

73 & Thank You
Dan Bolander, WB9TYT
Chairman of WAPR

GREEN LAKE REPEATER - FREQUENCY CHANGE

The Green Lake Amateur Repeater Association (GLARA), in cooperation with the Coordinator - Wisconsin Association of Repeaters (WAR), has scheduled a frequency change for the Green Lake Repeater (146.955/.355). WAR assigned this frequency to GLARA when 15KHz offset frequencies were inverted because of possible adjacent channel interference to standard pairs.

In order to conform to the current band plan and eliminate skip interference from repeaters in adjacent states, the Green Lake Repeater will invert it's frequency to 146.355/.955. The crystals are currently on order and will be installed as soon as they arrive.

Stations attempting to use this repeater are advised to try the new 'right-side up' frequency if they cannot access on the old frequency as there will probably be no warning of the exact date of frequency change.

de Steve - WB9ZRE for KB9WC - Trustee

The ----- Radio Club won it's first softball game of the season. The Kiwais Club forfeited!

SPECIFICATIONS FOR CONSTRUCTING PIPE FOR A FOREIGN GOVERNMENT

(From Amateur Radio, Wireless Institute of Australia, by VK3CFL - via ARNS)

All pipe is to be made of a long hole surrounded by plastic or metal centered around the hole. All pipe is to be hollow throughout the entire length. Do not use hole of different length than the pipe.

The Inside diameter must not exceed the outside diameter, otherwise the hole will be on the outside.

All pipes over 500 feet in length should have the words "Long Pipe" printed clearly on each end, so the contractor will know that it is a long pipe. Pipes over two miles in length must also have the "Long Pipe" in the middle to the contractor will not have to walk the entire length of the pipe to determine whether or not it is a long pipe or a short pipe.

All pipes over 6 inches in diameter must have the words "Large Pipe" painted on it so the contractor will not mistake it for a small pipe.

Flanges must be used on all pipes. Flanges must have holes for bolts quite separate from the big hole in the middle.

When ordering 90, 45 or 30 degree elbows be sure to specify right hand or left hand, otherwise you will end up going the wrong way.

Be sure to specify to your vendor whether you want level, uphill or downhill pipe. If you use the downhill pipe for uphill, the water will flow the wrong way.

All couplings should have either right hand or left hand threads, but do not mix the threads, otherwise, as the coupling is being screwed together at one pipe, it is being unscrewed at the other.

A W5 in Texas tells of a fish he caught that was too small. A couple of his friends helped him throw in back in the lake.

One W7 says the best way to stop a runaway horse is to bet on it.

Traffic on the net means telling everything the net control can get his ears on.

The Junior Operator uses soap as if it came out of his allowance.

We heard a discussion on filters when listening on 20 meters last week. One WA9 said, "A pretzel is a drinking man's a filter."

W0CCT (via ARNS)



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**K9ODK
WB9FDZ**

The next meeting of the Yellow Thunder Amateur Radio Club will be held on Thursday, August 11 1988, at 7:30 p.m. in room 25 of the Baraboo Civic Center, Baraboo WI.

The July 13 YTARC meeting was called to order by president, Steve Schwoegler, WB9RNL at 7:56 PM.

The minutes of the June meeting were aproved as published in BSSS.

Treasury stands at \$280.32 in the operating budget and \$312.26 total.

The Field Day results were 195 QSO's on phone 17 on CW. The Field Day operation was in 3A catagory plus Novice Station KB9ANB, a enjoyable time was had by all participants. Discussion shifted to the annual problem with the club generator and what could be done with it. Duane Grotophorst KA9HKL offered to work on in the near future to make it reliable.

Three members now have VE accreditation from ARRL/VEC.

Fall Novice classes were discussed as alternative to spring classes, with a start date either in September or October. Buck Nite was not held for lack of a random number generator (Art Kleevisch's W9WSS PC-8 computer).

Members in attendance were:

Steve Schwoegler, WB9RNL	Wisconsin Dells
Duane Grotophorst, KA9HKL	Loganville
Jim Decker, WB9UQT	Baraboo
Harry Mayland, W9FFT	Baraboo
Harold Reif, KA9YQP	Baraboo
Jim Romelfanger, K9ZZ	Baraboo

Minutes submitted by Duane Grotophorst, KA9HKL.

YTARC BIRTHDAZE

Jim Decker	WB9UQT	August	16
Ken Johnson	K9DZG	August	25

SENTENCE SERMON

Great occasions for serving God come seldom, but little ones surround us daily.

--Francis de Sales

UNIVERSAL TRAFFIC QUERIES (continued from page 4)

DRESS, copy it down as though you were addressing an envelope - each part on a separate line.

The TEXT is copied separately from the rest of the message, of course, and the signature follows - on a separate line. For ease of counting the words in the text, I suggest that you copy five words to a line. That way you merely have to count the lines and multiply by 5 and any partial lines to get your total count in seconds. Remember, your count should match that of the CHECK in the preamble of the message. If it does not, query the sending station. Perhaps you missed a word. At any rate, you and the station sending the message to you should agree on the check before you QSL it.

At this point, I would like to discuss the reception of traffic on CW.

A very useful device and one which most of todays equipment comes equipped with is the ability to operate "break-in" on CW. Some rigs offer a choice of "semi" or "full-breakin" capability. Full-breakin allows you to hear signals between characters whereas semi-auto breakin will allow you to hear signals after a brief delay in sending. Either method works fine for traffic handling. At higher speeds (35 wpm up), full breakin works best. If a word is missed due to a static crash or some other interference, transmission can be interrupted by the receiving station and the missed text repeated on the spot. Without breakin, the receiving station would have to wait until the entire message is sent to get any fills necessary. When the transmitting station using breakin hears the receiving station send "BK", he stops sending immediately to listen for the fills needed. The receiving station then sends the last word received correctly. The sending operator then repeats that word and then continues on from there.

To indicate to the receiving station that he is using breakin, he sends QSK (I can work breakin) before he starts sending the traffic. Some operators indicate that they do not have breakin by sending "NO QSK". If the sending operator does not indicate either way, try breaking if you miss something - just once. If it doesn't get results, forget it and get fills at the end of the message.

The way to get fills (missed message parts) is simply to send IMI BN (last word received before the missed portion) IMI (next word received). This translates to, "What is between blank and blank?" The sending operator should then send the missing portion. If you know that only one word or group was missed you simply ask for WA (word after) or WB (word before), which ever is shorter.

Sometimes you think you copied a word cor-

rectly but want to make sure. You can ask for a fill on that word just as though you missed it entirely, but the average operator will ask for a "confirm" (CFM). If the sending station says CFM or just "C" (correct) you're in business. If he says "N" (negative), he will then repeat the word correctly. You can also use this procedure if you know you received it correctly but suspect he may have sent it wrong. It is not necessary to use a question mark in getting a confirmation.

As stated in a previously, if your word count does not agree with the check, you have a problem that MUST be resolved before the message can be QSLed (rogered). If the check must be corrected, you indicate this by a slant bar and the correct check -- ie 10/9. The check that the message started with ALWAYS remains in the preamble, even if it was wrong.

Now, with regard to phone operation, a fast push-to-talk method or VOX is used in lieu of CW break-in. Send one group or letter at a time, pausing very briefly between each one. In most cases, the sending operator pauses after the preamble and the address to allow the receiving operator to break if he missed something.

Otherwise, the receiving procedure is very similar to that used on CW, without the abbreviations.

Resolving a disagreement on word count (check) is also easier on phone, if perhaps a bit more frequent. Usually, the sending operator can quickly cover possible error spots. If not, the receiving operator quickly reads the text as he received it - not the first letter of each word or group - and the sending operator quickly fills in the missing parts as necessary.

DO NOT say "I QSL you message number so-and-so." Just "ROGER" is sufficient. Q-signals are for CW - NOT FOR PHONE!

On RTTY, the procedure is pretty much the same as on CW.

CU on the nets. 73, Gene

W9YT REPEATER - FREQUENCY CHANGE

Well, the 146.085 repeater is no more..... (which isn't as bad as it sounds!)-- Effective JULY 12, 1988, W9YT/R is back on the air on its new pair, 146.085in/146.685 out, the inverse of the old pair. Preliminary checks show the repeater to be operating properly on the new pair. Thanks to Kevin, WB9YHB, for doing the work on moving the repeater to the new pair..

73 Doug, W9WI

The Field Day workers are "itching" to find out who volunteered to bring the mosquito repellant -- and forgot. (ARNS bulletin)

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